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L E C T U R E S
O N T H E
M A T E R I A M E D I C A :

C O N T A I N I N G
The N A T U R A L H I S T O R Y of D R U G S,
T H E I R V I R T U E S A N D D O S E S :

A L S O
D I R E C T I O N S for the Study of the M A T E R I A M E D I C A ;
A N D
An A P P E N D I X on the M E T H O D of P R E S C R I B I N G .

Published from the M A N U S C R I P T of
The Late Dr. C H A R L E S A L S T O N ,
Professor of B O T A N Y and the M A T E R I A M E D I C A in the University of
E D I N B U R G H ,
By J O H N H O P E , M . D . Professor of M E D I C I N E and B O T A N Y in that University.

I N T W O V O L U M E S .

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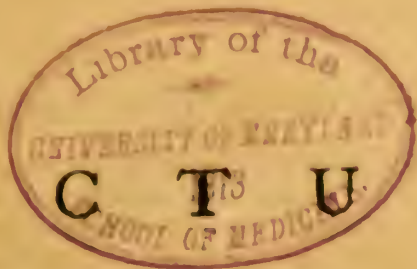
L O N D O N :
Printed for E D W A R D and C H A R L E S D I L L Y , in the Poultry ; and
A . K I N C A I D and J . B E L L , at Edinburgh.

M D C C . L X X .



15788

Crawford



LECTURES ON THE MATERIA MEDICA.

LECTURE XLVI. Of the MEDICINAL CORTICES.

AURANTIORUM, *Vide* Mala Citrea.
BERBERIS, *Vide* Baccæ Berberis.
CINNAMOMUM.

SECT. I.

CINNAMOMUM, & canella off. cinnamomum, five canella Zeylanica, C. B. & aliorum. Laurus Zeylanica; baccis calyculatis. *Herman. R. H.* 1561. Cinnamomum, five canella Zeylanica. *B. P.* 408. Canella, seu cinnamomum vulgare. *J. B. i.* 446. Canella. *Garc. Chf. ex.* 168. *Ger.* 1532. Cinnamomum. *Park.* 1579. Cassia, cinnamomea. *H. L.* 129. Canella, quæ Cuurdo. *Pison. Mans. Arom.* 165. Cinnamomum, offic. *Dale.* 299. Laurus, foliis oblongo-ovatis, trinerviis, nitidis, planis. *H. Cliff.* 154. Cinnamon, and cinnamon-tree of Ceylon.

“ It grows in the woods of Ceylon as common, and as little esteemed by
“ the natives, who call it Corunda Gauhah, as the hazel with us. It is not
“ a great, but a sizeable tree. The cinnamon on the tree looks whitish.
“ They scrape it, pull it off, and dry it in the sun. They take it only from
“ the smaller trees, although the bark of the greater is as sweet to the smell,
“ and as strong to the taste. The wood has no smell, is white and soft like
“ fir. The leaf resembles much the laurel, both in colour and thickness;
“ but whereas the laurel hath but one rib, the cinnamon hath three. When
“ the young leaves come out, they look red like scarlet; broken or bruised,
“ they smell more like cloves than cinnamon. It bears a fruit, which is ripe
“ in September, much like an acorn, but smaller: it neither tastes nor smells
“ much like the bark, but being boiled in water, it yields an oil swimming
“ on the top, which when cold is as hard as tallow and as white, and smells
“ excellently well. They use it for ointments for aches and pains, and to
Vol. II. burn

“ burn in lamps : but they make no candles of it ; neither are candles used
 “ by any but the king.” Thus Knox. See *An historical relation of the island
 of Ceylon in the East Indies. By Robert Knox, a captive there near twenty years.*
London, 1681. in folio. “ That it may be the best cinnamon, the tree ought
 “ neither to be too young nor too old, and that it be only the middle bark.”
Ribeyro. Harris Col. ii. 456.

“ The Dutch having, anno 1657, made themselves masters of Ceylon, by
 “ driving thence the Portuguese, (who for more than 100 years monopolized
 “ the cinnamon trade), and having in 1661 destroyed the cinnamon-trees of
 “ Cochin, though but a wild kind, all the cinnamon consumed in Europe
 “ comes from Holland. It is sold at Amsterdam at between forty and sixty
 “ stivers per pound.” Vid. *Savary Dict. i. 531. 973. & iii. 144.*

N. B. “ Cassia cinamomea aliquoties a me ex Zeylan in Belgiam transmissa,
 “ viguit in horto Bentingiano, Beverningiano & nostro ad secundum, ter-
 “ tiumve annum, quo incidente bruma rigidiori interiit.” *H. L. 130.* “ Ar-
 “ bor hæc vetita, Europæ Oras salutavit nunquam ; nec hortis nostris grata
 “ fuit unquam hospes, nec facile erit ullius.” *H. Cliff. 154.* It is a species
 of the laurus, as are also sassafras, benzoin, camphora, but carries both flowers
 and fruit, or is an hermaphrodite, and does not specifically differ from the
 cassia lignea tree, which is accurately described and figured by the name
 Carua, in *H. Mal. tom. i. p. 107. tab. 59.* It is Kurundu Zeylanensibus.
H. L. 130.

Cinnamon is a thin, light, reddish-brown bark, rolled up in long quills, of
 a pleasant, biting, aromatic sweet taste, and fragrant delightful smell. “ Sa-
 “ poris acri, pungente, suavi, subdulci, & aromatico, cum blando lentore in
 “ recessu, præcipue si recens sit ; odore fragrantissimo.” *Herm. M. S.* “ Sa-
 “ pore acuto, aromatico, acri, dulci ; odore fragrantissimo & suavi.” *Albin.*
M. S. “ Of a delightful aromatic smell, and a pleasant, sweet, biting taste.”
Miller Bot. p. 139. “ Sapore acri pungente, sed sine molestia ; subdulci &
 “ aromatico gratissimo ; odore suavi & fragrantissimo.” *Geoff. ii. 164.*

2. Canella Malabarica, Xylocassia, & cassia lignea. Off. cinamomum (cin-
 namomum) sive canella Malabarica & Javanensis. *B. P. 409. (R. H. 1560.)*
 Cassia lignea officinarum. *Park. 1580.* C. lignea fusca ; aromatici & glutinosi
 saporis, *J. B. i. 455.* C. vulgaris, Calihacha dicta. *Pis. M. Arom. 165.* Arbor
 canellifera Malabarica ; cortice ignobiliore, cujus folium Malabathrum offi-
 cinarum. *Breyn. Prod. ii. p. 18.* Cassia lignea, Offic. *Dale. 299.* Carua. *H.*
Mal. tom. i. p. 107. tab. 59. (57. H. Cliff.) Cassia Malabarica. *H. L. 130.*
 The cinnamon-tree of Malabar, and Malabar cinnamon, or cassia lignea,
 omitted in the *London M. M.*

“ Cinamomum luxuriat in insula Zeylan ; cassia lignea in Malabara, Su-
 “ matra, Java, & Fran. Hernande teste in insulis Philippinis. Cassia vero
 “ Malabarica, cum in *H. M. tom. i. p. 107.* Nomine Caruæ, accuratissime
 “ describitur, & a Zeylanica tantum acrimonia, suavitate, & virtutis præstan-
 “ tia, neutiquam facie, modove crescendi discriminatur.—Supervacaneum
 “ duxi hujus descriptionem hic apponere.” *H. L. 130.* Some say that the
 Malabar cinnamon, transplanted into Ceylon, turns true cinnamon, as if all
 the difference were owing to the *locus natalis.* “ J. B. scribit cassiam lig-
 “ neam, saporem suum aromaticum (qui in cinnamomo paulatim evanescit)
 “ con-

“ conservasse etiam post 30 annos : & Ja. Breynius utramque harum (cassiam
 “ ligneam, & canellam,) peculiarem arborem agnoscere, se dilucide demon-
 “ straturum (*Ep. Germ. an. 4. obs. 130.*) promittit.” *R. H. p. 1560.* But
 he has not done it yet.

The cassia lignea is commonly thicker, harder and browner than cinnamon,
 of a weaker taste and smell; not fibrous when chewed, but dissolving as it
 were into a sort of mucilage, or sweet glutinous substance. “ We have two
 “ or three sorts of cassia lignea in the druggists shops; whereof the quill sort,
 “ which is of the colour of cinnamon, and rolled up like it, but in lesser
 “ quills, is most esteemed. There is another sort, which is thicker, and not
 “ so curled up, but breaking blackish, and as it were resinous, of a strong
 “ and biting taste, which is likewise very good. The best is what comes
 “ nearest to cinnamon in smell, with a glutinous sweetness in taste.” *Miller*
Bot. 121. “ Est crassior cinnamomo, compactior & durior; est mucilagi-
 “ nosa, ita ut dentibus comminuta, nulla fere parte lignea supersite, liques-
 “ cat: cinnamomum vero, licet diligenter mastictur, ori pertinaciter adhaeret.
 “ Imbecilior est cinnamomo odore & sapore.” *Albin. M. S.*

3. Malabathrum, folium, folium Indum. Off. Tamalapatrum, sive folium;
 cadegi Indi (*i. e.* folium Indum) Arabibus. *B. P. 409.* Malabathrum, &
 folium Indum officinarum. *J. B. i. 430. R. H. 1563.* Folium Indum. *Garc.*
Clus. ex 177. Tamalapatra. *Ger. 1534.* Folium Indum, sive Malabathrum.
Park. 1585—1. Dale, 299. The Indian leaf.

It is a large laurel-like leaf, more pointed at each end, with three notable
 ribs running lengthways, of a yellowish green colour, and hot aromatic taste,
 with the flavour of cloves.

It is the leaf of the canella sylvestris Malabarica. *R. H. 1562.* Katou-
 Karua. *H. Mal. v. 105. tab. 53.* According to *Dale, l. c.* and *Geoff. ii. 265.*
 that is the great wild cinnamon-tree of the mountains, the leaves whereof are
 very large. It is the leaf of the cinamomum, sive canella Malabarica &
 Javanensis. *B. P.* according to the *New London Dispensatory.*

“ They are generally believed to be the leaves of the cassia lignea, or cin-
 “ namon-tree, or both; for upon comparing them with leaves of the true
 “ cinnamon, of which I have a branch, I can find very little difference, ei-
 “ ther in shape or colour, smell or taste. How far the leaves of the canella
 “ Malabarica, which are esteemed to be the true folia Inda, differ from these,
 “ is uncertain, since they are never brought to us, these supplying their
 “ place, and I question not but to as good purpose. They are seldom used
 “ now, mace being appointed in our Dispensatories in their stead.” *Miller*
Bot. 202.

It is uncertain what the *μαλαβαθρον*, *Dioscor. l. i. c. 11. p. 11.* was. *Gar-*
cias thinks it the tamalapatra. “ Appellant autem, says he, Indi folium ta-
 “ malapatra, quam vocem Græci & Latini imitantes, corrupte Malabathrum
 “ nuncuparunt. Arabes Cadegi Indi, *i. e.* folium Indum dicunt.” *Clus. ex.*
177. If you want more of this, you may consult *C. Hoffman, p. 323. Bod.*
in Theophr. p. 1032. J. B. i. 430—435. R. H. &c.

Cinnamomum, *κινναμωμον*, *Scaliger (Not. in Garz.)* derives from the He-
 brew *Kinamon*; and *Nicander*, in *Theriakis*, writes it *κινναμον*, and *Ovid*
Cinnamum. “ Dicunt aves magnas, has ferre festucas, quas nos perentes à

“ Phœnicibus cinnamomum vocamus. Herodot. Aiunt etiam cinnamomum
 “ avem esse ex locis illis, eamque aliunde ferre, quod cinnamomum vocant,
 “ ex eo sibi nidum ædificare, summis arborum ramis impositum. Incolas
 “ apto ad sagittas plumbo dejicere, atque ita ex congesto colligere cinnamo-
 “ mum.” *Aristot. Hist. Animal.* l. 9. c. 13. p. 711. That it was found in
 any bird’s nest, or grew in marshes guarded by wild and noxious animals,
 &c. are reckoned fables by *Pliny*, l. 12. c. 19. p. 311. Vid. *Bod. in Theoph.*
 p. 984.

Whether the cinnamon of the ancients and of the moderns is the same
 thing ; and if not, what their cinnamon was, I shall leave to others to de-
 termine. When you read *Dioscorides*, l. 1. c. 13. p. 12. and *Pliny*, l. 12.
 c. 19. p. 311. you will see that none of the conjectures of the learned are very
 well founded, “ Quoniam fabulosa, varia et incerta sunt, quæ de cinna-
 “ momo et cassia, a veteribus Græcis et Latinis traduntur, ego potius in
 “ *Garciaë*, *Monardis*, *Scaligeri* et *Amati* sententiam propendeo, veterum scilicet
 “ et recentiorum cinnamomum, necnon cassiam eorundem, unam et eandem
 “ rem esse.” *R. H.* 1559. The use made of them perhaps preserving both
 name and memory ; which is as probable as *Dodonæus* and *Bodæus-a-Stapel*
 their opinion, who think that the small branches of the *carophyllus* aroma-
 ticus, which are sometimes brought among the cloves, are the cinnamon
 antiquorum.

Garcias says, the bark peeled off grows again in two or three years. *Mr.*
Geoffroy, ii. 166. asserts it, though it does not seem very probable. Vid.
Garc. Clus. ex. 170. & *R. H.*

S E C T. II.

Cinnamon is the most agreeably stimulating of all the aromatics. It warms
 and comforts the stomach, cheers the spirits, promotes perspiration, and ex-
 pels wind : is called cordial, cephalic, stomachic and uterine ; and commended
 in lowness of spirits, lipothymies, want of appetite, cholics, hard labour, ob-
 struptione mensium et lochiorum ; in a word, in all cold and phlegmatic dis-
 tempers, *et ubicunque natura languet.*

Cassia lignea is of the same nature with the cinnamon, but much weaker ;
 is said to be more astringent, and good in all sort of fluxes,—*sine ratione.*

The Indian leaf seems to partake of the virtues of the cassia and cloves ;
 so is a stimulating aromatic diaphoretic. But it is used only in the *mithrida-*
tium and *theriaca*, in which the *London Dispensatory* allows mace to be taken
 for it.

“ Cinnamomum calfacit et siccatur, aperit, discutit, menses et partum acce-
 “ lerat ; omnia viscera, spiritusque singulos recreat ; concoctiones juvat : hinc
 “ usus ejus frequentissimus est in virium imbecillitate, lipothymia, capitis, ven-
 “ triculi et uteri affectibus frigidioribus. Præp. sunt, 1. Confectio. 2. Aqua.
 “ 3. Tinctura. 4. Elixir. 5. Oleum. 6. Sal. 7. Balsamum. 8. Syrupus.
 “ 9. Magisterium. 10. Species Diacinamomi.” *Schroder.* p. 567.

“ Folia iisdem facultatibus pollent, quibus spica nardi, sed fortioribus :
 “ urinam potenter movent.” *Schroder.* 619. “ Malabathrum eadem cum
 “ nardo

“ nardo vires fortitur, sed illud efficacius omnia præstat : attamen Mal-
 “ bathrum et urinas ciendi majore vi pollet, et stomacho convenientius
 “ est,” &c. *Diesker.* l. i. c. 11. p. 11.

For, 1. Cinnamon is so agreeable to every palate that it is as much used for its taste and flavour, as for its virtues, on account of which however it may be called the prince of spiceries or aromatics.—2. Its specific virtues are lodged in a most subtle penetrating, hot, even caustic, heavy essential oil. This oil bears but a small proportion to the bark itself, or to the other principles it contains. “ Cinnamomi libra una, dat olei ʒij. vel ʒjß.” *Schroder.* But Lemery says ʒij. of the best cinnamon will scarce yield ol. essen. ʒjß. (*Chym.* p. 588.) and according to Sala and Hoffman, scarcely ʒi. (*Rager. Inir.* ii. 893.) And yet this oil, in an open wide-mouth'd glass vessel, will perfume the air indeed all round it with the smell of cinnamon. “ Interim oleo sic exposito, “ perit omnis singularis virtus, brevique restat pondere idem ferme priori “ oleum, at exhaustum penitus, veterisque egenum virtutis.” Vide *Boerhaave*, ch. i. p. 76. Besides the cinnamon water with which the oil rises, exposed to the air, suffers the same change. “ Brevi aqua tibi superstes erit iners, ne- “ que dotes miras sui exhibet aromatis; cæterum haud deprehendes pondus “ ejus magis diminutum, quam quod de simplici aqua communi, æquali ex “ vase, eodem exhalavisset loco, inter tempus idem.” *B. Ibid.* While the cinnamon, remaining after distillation, dried, appears to the eye little different from what it was before, having lost not a sixth part of its weight; but neither tastes nor smells of cinnamon. Hence it is not the oil, but the spirit in the oil, and how small a particula is it to which the notable virtues of cinnamon are owing? “ Quare novisti jam omnem insitam aromati vim pro- “ priam, huic affixam paucissimo oleo, sed in eo esse partem minimam. “ Atque particularis hæc demonstratio omni ferme alteri applicari poterit.” *Boerb.* l. c. “ Olo aromatum abstracto, remanet corpus aromatis, velut “ ingratum. Cinnamomum puta, abducto oleo, sapit corticem quercus, sua “ adstrictione.” *Helment, Tria prim. Chymicerum Principia*, §. lxxvii. p. 396. The great Boerhaave observes also, that if the purest ol. cinnamomi be dissolved in alcohol, and all the alcohol be distilled off by a gentle heat, it will carry the spirit of the cinnamon along with it, leaving the oil behind it in fundo spiritibus privatum & simul resinescens. Vide *Chem.* ii. p. 243.—“ 3. Cl. New- “ mannus (*Prælect.* p. 782.) Cinnamomum compositum esse dicit, ex parti- “ bus oleoso-salino resinoso-gummeis, & pro maxima parte terrestribus. Ita “ ut in cinnam. ʒij. contineantur terræ insolubilis ʒxij. sere. Resinosi ʒj. “ Gummosi ʒjß. & olei essentialis ʒijß. Oleum hoc scaturire videtur multo sa- “ lino quia cum aqua, non cum spiritu vini in distillatione ascendit, pondero- “ sum est, & difficulter ab aqua separatur. Aut oleosis partes, non intime “ cum resinosis esse mixtas, illis existentibus separabilibus per distillationem “ cum aqua, his autem cum vini spiritu per extractionem.” Vide *Rager. Introduc.* vol. ii. p. 886. Another remarkable in this essential oil is, that in time a great part of it turns to a real salt, dissolvable in water. “ Mirum “ satis in hoc oleo plurimis observatis constitit: si enim genuinum, stillari- “ tium, in Ceylona paratum, magna copia, vitris quam accuratissime clausis, “ per annos plurimos, loco quieto, conservatur, magna ejus pars in verum “ sale, aqua solubilem, virtute propria cinnamomi prægnantem, mutata di-
 “ citur;

“ citur; ut a variis fide dignis accepi. Insignis Slarius ait, dimidium illius
 “ olei, viginti annorum spatio asservati, vitris bene clausis, in salem purum
 “ abivisse.” *Transact. Comp.* tom. iii. p. 362. *Boerb. Chem.* ii. p. 121. Vide
Phil. Transf. N^o. 213. p. 208. for September and October 1694.—4. It is no
 less wonderful, if true, that the different parts of the cinnamon tree, should
 yield oils very different in their qualities. “ Destillatur ex radice cortice
 “ camphora, ejusdemque oleum: ex trunci cortice, oleum cinnamomi: ex
 “ foliis oleum caryophyllorum: ex fructibus oleum juniperino simile, cum
 “ pauxillo cinnamomi ac caryophyllorum mixtum: ex his & excoquitur oleum
 “ pingue crassum instar ceræ, ad emplastra unguenta & candelas conficiendas
 “ commodissimum, medicamentum itidem, interne & externe usurpatur,
 “ summe anodynum.” *Ex Literis D. Pauli Hermannii, ad D. Syen. R. H. 1561.*
 Vide ibi quæ de camphora cinnamomi habet. — 5. I poured aquæ bullien-
 tis ʒvj. on cinnamomi ʒj. and when it had stood 24 hours it was pretty well
 tinctured, and tasted and smelled agreeably of the simple; it did not sensibly
 redden the tincture heliotropii, even after it stood macerating ten days; but
 a solution vitrioli turned it to a deep green, and made it opaque; and the
 mixture, gradually precipitating a little olive sediment, became more clear,
 still greenish: but a stronger infusion, scarcely precipitated any thing. I said
 it did not sensibly redden the tinct. heliotropii, because though its own colour
 made it a little more reddish, yet ol. tartari dropt into it did not alter the co-
 lour of this mixture. After I don't know how many fresh affusions of boiling
 water, and long macerations, the residuum dried weighed gr. li. which cal-
 cined to gr. According to *Cartheuser* ii. p. 187. Cinnam. ʒj. gave extracti
 aquosi ʒj. but the same quantity of cinnamon yielded extracti spirituosii ʒʒ.

S E C T. III.

It may be given in powder to ʒj. but ʒʒ. need not be exceeded, both by
 reason of its bulk and of its efficacy; a drachm being enough in infusion.
 The preparations are aqua simplex, or sine vino; aqua spirituosæ, or cum
 vino; & oleum essentielle. Cinnamon enters into aquam absinthii composi-
 tam, aquam mirabilem, spir. lavendulæ compos. sp. salin. aromat. laudanum
 liquidum *Sydenhami*, tinct. salutiferam, decoctum album utrumque, decoctum
 diascordii, emulsionem commun. syr. de senna cum rheo, pulv. ari compos.
 confect. alkerines, diascordium, mithridatum, theriacam, troch. cypheos,
 magma hedychroi. Ac denique oleum ejus ingreditur pulverem ad partum,
 & elect. cardiacum.

“ Exhibetur substantia a ʒj. ad ʒʒ. vel ʒj. in infusione a ʒʒ. ad ʒij. oleum
 “ essentielle, a gut. j. ad iij. cum saccharo in forma elæosacchari.” *Geoff.* ii.
 p. 168.

“ Suspiciantur nonnulli cinnamomum, olei sui maxima parte spoliari in In-
 “ diis.” Vide *R. H. 1562.* “ There is an oil drawn from cinnamon, called
 “ also the essence, or quintessence de canelle, an excellent cordial: but the
 “ Dutch only having the secret, the artists and chemists of France make it
 “ both at a greater expence, and not so good; which obliges the greatest part

“ of the druggists to bring it from Holland.” *Savar. Diss.* i. 531. See the process in *B. Chem.* ii. 119.

Pure cinnamon oil must be very dear; viz. 128 times the price of the bark itself, if cin. lbj. yield only olei ʒj. I observed *anno* 1721, that the druggists in Holland sold an oil of cinnamon at 6 gilders per ounce; but the finest, oriental, they valued at 20 gilders per ounce, that is 50 stivers the ʒj, or the common price of the pound of cinnamon at Amsterdam. Hence it appears that all the secret the Dutch are masters of may be only how most artfully to counterfeit it; or distilling it in the Indies when fresh, thus obtain some more oil, than it can afford when brought to Europe, or long kept. “Cortex si recens distilletur, multum suppetit olei, antiquum vero & diutius asservatum, olei perparum exhibet.” *Geoff.* ii. 166. However it may be sophisticated (α) with alcohol; but the cheat may easily be discovered, for dropt into water, it will turn milky. (β) With light oils; but if this be dropt into water, and strongly shaken for some time, they will separate, the one swimming above, and the other subsiding: It may be tried also with highly rectified sp. nitri. (γ) With heavy oils, as oil of cloves, of sassafras, &c. but making it into an elæosaccharum, and dissolving it in water, or small spirit, the taste and smell readily discover the cheat.” “The best way to know its goodness, is by dropping it on sugar, and then dissolving it in a small spirit: for thus diluted, the taste easily discovers any foreign mixture.” *Quincy*, p. 94.

The distilled waters, and especially the oil, have all the virtues of the cinnamon, excepting its astringency, if it can be said to be astringent at all. The water sine vino, is given to ʒiv. cum vino to ʒij. — Olei gut. j. cum saccharo, will make aquæ ʒij, good cinnamon water: so in elæosaccharo it may be taken in any liquid ad gut. j. vix ij; for by itself it is a strong caustic.

“In hoc oleo spiritum igneum penitus, brevique consumentem partes corporis humani viventis, instar veri ignis, neque in aliis, invenimus, acius quid; ut experimentis sæpe constitit, sive externe applicatur, sive hauritur interne, statim calefacit, excitat, inflammat, imo promptissime in escharam gangrænosam exurit. Interim in universa M. M. invenitur nusquam aliud, quod huic comparari queat, ratione virtutis instaurantis. Sique ullum habetur scæminis solamen ad frigidi, mucosi, uteri pituitam, id vero hoc ipsum est stillatitium oleum, lege artis adhibitum.” *B. Chem.* ii. p. 121. This oil is in a manner the basis of a powder, which I mentioned formerly, now famous in France, Germany, &c. It is called, Aurum horizontale & panacæa Kornmanni, pulvis Dresdensis sive auratus Germanorum. *Pharm. Paris.* Pulvis aureus Cellensis. *Dispens. Ratissb.* Vulgo pulvis solaris seu aureus Zellenensis, panacea solaris, pulvis solaris cinnabarinus. “A variis varie paratur, tam quoad diversam proportionem ingredientium (viz. cinnabaris nativæ & antimonii, ambrægriseæ, olei cinnamomi, sacchari, & calcis ac folior. auri) quam quoad admistionem aliorum, vel omissionem ambræ putæ & auri. A viribus analepticiis præcipue laudatur, quæ debentur oleo; color tantum cinnabari. Nam certus novi qui magnum pretium statuebat compositioni suæ, quæ præter olei cinnam. gut xx. cinnabaris factitiæ ʒj. & sacchari Caparini ʒij. admistas continebat nihil. Ego jam non demiror cur multorum medicamentorum præparaciones celari soleant.” *Vide Rieger Introduc.* ii. p. 894. The pulvis Dresdensis, *Zellenensis edit.* 1748, sive auratus

tus Germanorum. R Cinnab. fact. ʒj. cinnab. antimon. ʒß. sacchari candi ʒij. ambari cinericei, & olei cinnam. āā ʒj. f. f. a. pulvis. *Cod. Medicam.* p. 62.

“ There would probably be little demand for the cassia lignea, if it were not to put it off for true cinnamon: a pound of cinnamon being as dear as four pounds of cassia lignea.” *Savary Dict.* i. p. 572. “ Ubi demulcendum & astringendum, ratione ejus glutinositatis, cinnamomo anteponitur. In tussi & asthma commendatur . . . in diarrhœis quoque & dysenteris, ad viscera roboranda, & ab humorum acredine defendenda.” *Geoff.* ii. 172.

L E C T U R E XLVII.

CORTEX CITRI. *Vide Mala Citrea.*
FRAXINUS.

S E C T. I.

FRAXINUS. Off. Fraxinus excelsior. *B. P.* 416. *T.* 577. Fraxinus, *Dod.* 833. *Ger.* 1472. *R. Syn.* 469. F. vulgaris, *Park.* 1418. F. vulgator. *J. B.* i. ii. 174. *R. H.* 1702. Fraxinus, floribus nudis, *H. Cliff.* 470. The common ash, or ash-tree.

It grows wild in our woods, as well as in hotter climates, flowering in February and March, and ripening the seed in October. It is a large beautiful and useful tree.

“ Fraxinus in sylvis pulcherrima, pinus in hortis,
“ Populus in fluviis, abies in montibus altis:
“ Sæpius at si me, Lycida formosæ, revisas,
“ Fraxinus in sylvis cedat tibi, pinus in hortis” *Virgil Ecl.* vii. v. 65.

Semen linguæ avis dictum, folia, cortex raro lignum, usualia sunt, potius medicinalia.

“ Latini nominis etymon probabile apud grammaticos non invenio: nam a “ frago dici, quod in fragosis locis nascatur, aut a φραξις, sepimentum, quod “ ad sepes conficiendas utilis sit, minus placet.” *R. H.* All agree that our ash is the fraxinus and μυλῖα, of the ancients. For though Dioscorides does not describe it, yet *Theophrastus Hist.* lib. iii. c. xi. p. 181. does, and also Pliny, but less accurately. “ Fraxinus . . . procera ac teres, pennata & ipsa folia; “ multumque, Homeri præconio, & Achillis hasta nobilitata. Materies est “ ad plurima utilis.” *Plin.* lib. xvi. c. xiii. p. 384.

S E C T. II.

The bark and leaves are attenuating, deobstruent and diuretic; called splenic, and lithontriptic; and commended in the spleen, jaundice, dropsy, gravel, excessive fatness, lues venerea, &c. and externally as discutient. The seed, being more oily, is preferred by some as a better diuretic.

“ Folia

“Folia siccant valide, curantque ictus serpentum. Sed usus sunt rarioris.
 “Cortex & lignum, siccant iidem, attenuant, splenis duritiem specificæ
 “emolliunt; diuretica sunt lithonotriptica, eaque non è postremis. N. sunt
 “qui lignum die Joan. Baptistæ cæsum, vulneribus solo affricatu mederi cre-
 “dunt; cædunt autem alii ante solis ortum, alii ipso meridiani temporis
 “puncto. Semen (folius adhærens) calfacit & siccatur valide, conducit epa-
 “ticis, pleuriticis, calculosis. Præparationes sunt, 1. Extractum ex cortici-
 “bus. 2. Oleum, ex ligno. 3. Sal com. ex cinere corticum. N. sal ex
 “ligno incinerato vulneribus intus & extus, cum felici successu, usurpatum
 “vidi.” *Schroder*, p. 592. Vide *Hoffman*, *Mayeri*, p. 416.

For 1. The bark is of a bitter, somewhat musty, and subastringent taste, and peculiar smell, when green only: as are also the leaves, but not musty. The seeds are bitter and oily. The bitterness is not excessive, far less the stypticity. “Corticis infusum vel decoctum, vitrioli solutionem, gallarum instar, nigro colore tingit. *Geoff.* iii. p. 497. I made an infusion foliorum, and also summitatum, sine foliis, separately, more there; and after a day’s maceration, poured into a glass of each a solution of vitriol, which turned them greenish dark and opaque; and they precipitated slowly. They did not turn tinct. heliotropii red; nor did ol. tartari make them fetid. — 2. An infusion corticis, also summitatum, but not foliorum, reflects the blue, and transmits the orange rays of light, but not so strongly as the lignum nephriticum, or more faintly. Acids and alkalies have the same effect on both. Ash-tops and leaves are commonly burnt for the lye they afford, which is used in bleaching. “The leaves analysed give a great deal of acid liquors, much oil and earth, “a little urinous spirit, no volatile salt, and a moderate quantity of fixed salt.” *T. Hist.* p. 333. — 3. *Dioscorides*, lib. i. c. cviii. p. 58. says, “Fraxini foliorum succus, & ea ipsa tum in vino pota, tum etiam imposita, viperarum moribus opitulatur.” A friend told me that by a fomentation of ash-leaves and tops, he cured his dog in a night’s time, which from the bite of a viper had his head so swelled that he could neither see nor eat. I have used them frequently in discutient fomentations; though I think the antipathy the serpents are said to have to this tree fabulous. “Tantaque est vis, ut ne matutinas quidem, occidentesque umbras, quam sunt longissimæ, serpens arboris ejus attingat, adeo eam procul fugiat. Experti prodimus, si fronde e gyro claudatur ignis & serpens, in ignem potius quam in fraxinum fugere serpentem.” *Plin.* lib. xvi. c. xiii. p. 384. “Idem etiam se expertum prodit Ambr. Paræus. At Camerarius contrarium se expertum in serpentibus Germanicis: & D. Charas (*in obs. & experim. de viperis*) asserit se facto circulo e foliis fraxini, qui habuerat circa tres pedes diametri, viperam vivam in eum immisisse, que, folia nihil verita, illico sub iis sese occultum ivit.” *R. H.* 1703. This Mr. Geoffroy transcribes, without mentioning Mr. Ray. — 4. It is commended in many diseases, as for the spleen. “In libro de Dynamidiis Galeno adscripto legimus, ad splenum, cortices fraxini excoque in vino, & bibat quotidie donec sanetur. Si vis probare, da Porcello per tri-duum ut bibat, & in quarto occide ipsum, & non invenies splenem.” Vide *J. B.* “In poculis ex ligno factis, si quis assidue bibat lienem extenuari aiunt, eoque nomine & corticis decoctum quidam exhibent, quo etiam alii, qui, vice ligni guajaci felici successu utuntur.” *R. H.* For the dropsy, Vol. II. C ague,

ague, rheumatism, green-sickness, fatness, &c. “Fraxini semina (*autore Hippoc.*) “N^o. x. trita & cum vino pota, urinam ducunt & vulvarum doloribus auxilio “sunt.” Vide *J. B.*

According to the analyses in *Geoffroy* iii. p. 496. Fol. recentium lb v. gave olei spissi 3ij. 3ß, salis fixi alcali 3ß. gr. xxv, terræ 5xij. gr. ij. — And cort. recentis lb v. afforded olei spissi aquâ gravioris 3ij. 3ij. fissura erat in retorta. Salis fixi alcali 3ij. gr. xlv. terræ 3iv. 3ij. gr. ix. Is there such a difference in the quantities of fixed salt and earth? Scarcely. “Semen fraxini incoercibile “fere sal volatile, præbet.” *Ludov. Pb.* 209.

The bark may be given in infusion or decoction to 3ß, perhaps 3j. the dose not being determined. I would begin with 3ij. The seed in powder, to 3j. or rather in emulsion. But it is a too common tree to be valued or used now-a-days.

GRANALORUM. Vide Balauſtium.

GUAJACI. Vide Guaiacum.

MACIS. Vide Nucifſta.

QUINAQUINA.

SECT. I.

Cortex, Cortex Peruvianus, China China, Quinaquina offic. Arbor febrifuga Peruviana. *Jonſ. De Dr.* 476. Arbor febrifuga, Peruviana; China Chinæ, & Quinquina, & Gannana-peride dicta; Hispanis Palos de calentura; cortex arboris, cortex Peruvianus vulgo dicitur, inque pulverem redactus, pulvis patrum (ſcilicet Jeſuitarum) & pulvis Cardinalis de Lugo; Anglice the Jeſuit's powder, *R. H.* 1796. China Chinæ, *Schroderi App.* p. 30. Cortex Peruvianus, ſeu China Chinæ, *Morton, Pyretolog. Exercit.* i. c. vii. Cortex Peruvianus, Peruanus, China Chinæ, Quinquina offic. *Dale* 291. Kina Kina, cortex Peruvianus, & cortex febrifugus offic. vulgo, Quinquina, *Geoff. Mat. Med.* ii. 179. Arbre de Quinquina, *Mem. Acad. R.* 1738. p. 319. Cinchona Lin. *G. P.* 1021. p. 526. The Jeſuit's bark, or the bark, or Peruvian bark.

It is a pretty thick, dry, and friable bark, brown, rough, tranſverſely cracked, and ſometimes moſſy on the outſide, of a cinnamon colour within, and of a bitter and muſty aromatic taſte, with little ſmell, *i. e.* not ſtrong, but ſtill agreeably muſty.

If good and genuine, it is friable, not tough nor very hard, nor viſcous in the mouth, but fibrous; of a good cinnamon colour when powdered, not brown nor blackiſh; freſh, not carious; of a bitter and aromatic muſty taſte, neither intenſely bitter, nor nauſeous, nor very aſtringent. “It ought to be “of a bright cinnamon colour on the inſide, brown and ſometimes whitish on “the outſide, having moſs frequently growing on it, with ſeveral tranſverſe “cleſts or cracks; appearing upon breaking full of ſhining particles; that of “the ſmaller branches ſolling up like caſſia lignea. It is of a bitter and re- “ſtringent taſte.” *Miller Bot.* 154.

It is brought from Peru, where the natives first taught the Spaniards its use. How long it was known there before, is uncertain, but the first European cured by it, that we hear of, was the Countess of Cinchon, anno 1640. See *Morton De Febris Intermit.* c. vii. "Quomodo vero magnum hoc febri-
 "fugum Hispanis, cæterisque Europæis primum patefactum fuerit, narrat
 "M. Antonius Bollus, (mercator Genuensis, in epistola sua Italice conscripta)
 "autor fide dignus: Nimirum sorte fortuito in civitate Limensi, quæ est
 "metropolis regni Peruviani, uxor proregis, qui tum temporis (viz. anno
 "1640) erat Comes de Cinchon, febre tertiana sævissima (qualis illic loci epi-
 "demia esse solet) correpta fuisse decumbere videbatur. Rumor (ut sem-
 "per de magnatibus) per urbem divulgatus, tandem per finitima loca ad
 "Loxam usque pervenit. Hispanus illius loci tunc temporis profectus, per
 "litteras proregem monebat, in arcanis sibi esse remedium, cujus auxilio pro-
 "reginam ilico revalituram spondebat. Lubentissime annuens proregina,
 "corticem præparatum sumpsit. Quid sit? Stupentibus omnibus, dicto citius
 "convaleuit. Hinc fama hujus arcani titulo Pulveris Cæmitissæ insigniti, ubi-
 "que per civitatem Limensem, totamque Americam, Hispanicæ ditioni sub-
 "jectam, brevi multum inclauit. Dilcedente autem prorege ex India, ubi
 "in Hispaniam reversus est, ilico percerebuit ubique rumor de novo hoc fe-
 "brisfugo, quod post experimenta frequenter facta, votis agrorum semper &
 "ubique respondebat. Circa annum salutis 1649. famam suam indies magis
 "magisque procegit, non tantum per Hispaniam, verum etiam Italiam, Ro-
 "mam usque, conatibus imprimis Johannis Cardinalis de Lugo Societat. Jesu,
 "& cæterorum Collegii Jesuitarum Romæ patrum, qui eum gratis religiosis
 "& pauperibus largiebantur. Unde infaulsto omine, atque in vulgi refor-
 "mati terrorem ac scandalum, Pulvis Patrum vulgo audit, *Anglice*, the
 "Jesuit's Powder." Thus *Morton*. All which, and much more, is transcribed
 "by Mr. *Geoffrey*, *M. M.* ii. p. 181. without naming his author. Mr. *Savary*
 "says also, "That it was but sixty years since this bark was first known in
 "France, whither Cardinal de Lugo brought it, in 1650. When a dose of it
 "(continues he) is said to have been sold at a crown of gold. This too great
 "price, or perhaps the little effect it had, through its preparation not being
 "well known, brought it into disuse; and it began to be little known when
 "Chevalier Talbot an Englishman, in 1706. (for 1619.) brought it again in
 "vogue, by the many surprising cures performed both in the court and town,
 "by this powder prepared his own way; the secret whereof was made public
 "by the generosity of Lewis XIV. who by a liberal reward obliged that
 "ingenious Englishman to communicate his preparation." Thus *Savary*.
 "Anno 1649, this bark was brought from Peru to Spain by a Spanish vice-
 "roy. In the same year the Cardinal de Lugo, and some Jesuits from Ame-
 "rica, having brought it, and spread the knowledge of it through Europe,
 "made great gain of it." Vide *Lemery D.* 227,
 "But according to Mr. de la Condamine's Memoire of the Quinquina tree,
 "sent from America, dated May 29, 1717, and published in the *Mém. Acad. R.*
 "anno 1738. p. 319—346. "This bark was used, and its effects known, at
 "Loxa, by the Spaniards, long before the rest of the world became acquainted
 "with it. Yet it was the Countess of Chinchon's being cured of an obdurate
 "tertian by it, that first made it famous, which was in 1638, the Count's
 "vice-

“ viceroyalty having ended in Dec. 1639. After the countess’s recovery, she
 “ procured a quantity of the bark, and distributed it to all who needed it, and
 “ thus it got the name of the Countess’s Powder. Some months after the
 “ Countess freed herself of that trouble, by giving what bark she had to the
 “ Jesuits; who continuing to distribute it gratis, it was on that account called
 “ the Jesuit’s Powder. A little after this the Procurator-general of Peru re-
 “ turning to Rome, the Jesuits sent by him some quantity of it to Cardinal
 “ de Lugo, of their society: from whose palace at first, and then from the
 “ apothecary-shop of the Roman college, it was given to the poor gratis,
 “ and to others for its weight of silver, by the name of the Jesuit’s Powder,
 “ or Cardinal’s Powder. It is said that the same Procurator of the Jesuits,
 “ going through France to Rome, recovered Lewis XIV. then Dauphin, of a
 “ fever with the Quinquina: (which must have been before May 14, 1643.
 “ when Lewis XIII. died, if not a French fiction?) In 1640, the Count and
 “ Countess of Chinchon, being returned to Spain, their physician Inande Vega,
 “ who had brought une provision de Quinquina along with him, sold it at
 “ Seville at 100 reals (*i. e.* about *N. B.* 56 shillings sterling) per pound. Its
 “ reputation continued (adds he) until the unpeel’d trees becoming scarce, the
 “ inhabitants of Loxa, out of avarice, mixed other barks with it; which be-
 “ ing known, the Quinquina of Loxa fell into such discredit, that it would
 “ not give half a pialter per pound. And in 1690, several thousand pounds
 “ of it lay at Piura and Payta, and nobody to purchase it.” Thus Mr. de la
 Condamine makes the Grand Monarque to be the first in Europe, who felt the
 effects of this medicine, and gives the Jesuits the honour of having first brought
 it thither. I wish he had given his authority. For how he comes to be bet-
 ter informed than Bollus who lived many years in Peru, (*R. H.*) three or four-
 score years before him, does not appear. I shall only observe further, that in
 1688, and some years before, there were imported at Marseilles, from Cadiz,
 between 150 and 200 quintals of this bark annually; valued at that year at
 30 to 40 sols per pound. *Vide Sav. Dict.* iii. p. 551.

There is an account of Mr. Talbot’s method of cure in a little book called
Le Remede Anglois, pour la guerison des Fievres, publie par Ordre du Roi. Par
Nicolas de Blegny. A Paris 1682. in 12mo. of 141 pages. Then sure the
 bark was in as great credit as ever, though the great import brought down
 the price: and whatever character some are pleased to give Mr. Robert Tal-
 bot, Talber, or Taber, or he may deserve; yet he, by his audacious, and per-
 haps also injudicious practice, contributed not a little to the discovery of the
 real virtues and right use of this valuable medicine.

“ Pulverem hunc ante 30 annos (so about the year 1658) cum primo in
 “ Angliam invecus esset, in magna æstimatione fuisse memini: Sed animad-
 “ verto eum (quod scilicet nimis parca dosi exhiberetur) paroxysmum unum
 “ vel alterum, aut forte plures avertere, nec febrem penitus expugnare, ve-
 “ rum ægrotum plerumque recidivam pati, ob suspiciones nescio quas, in
 “ crimen adduci cœpit, & paulatim in desuetudinem abire. Donec nuperis
 “ annis, D. Robertus Tabor, dosi ejus valde aucta, non minus felici successu,
 “ quam incepto audaci, febribus omnibus profligatis, usum resuscitavit. Hic
 “ enim non intra scrupulos subsistebat, sed ad drachmas & uncias ascendebat,
 “ indeque voti compos factus, magnam & sibi, et pulveri famam conciliabat.”

“ *R. H.*

“ R. H. “ Tandem nostris temporibus, in Gallia præcipue & Anglia sum-
 “ mope decantatur hoc febrifugum, postquam Delphinus Galliarum, variis
 “ ante, sed in vanum adhibitis remediis a Talbotio Anglo cort. hoc a quartana
 “ liberatus fuit. Unde factum ut et Rex Ludovicus XIV. a citato jam Tal-
 “ botio, medicamentum hoc, antea in secretis habitum, magno pretio redi-
 “ meret, & in subditorum solatium scripto quodam publico propalaret.”
 Mich. Bern. *Valentini Discursus Acad. de China Cbinæ Miscel. Cur. Decur.* 3 an.
 3. p. 47. for 1695 and 1696. — “ Cum insuper medici cæteroquin docti &
 “ probi animadvertissent pulverem febrifugum paroxysmum tantum unum aut
 “ alterum, aut fortasse plures avertere, nec febrem penitus expugnare, verum
 “ ægrotum plerumque recidivam pati, ob suspensiones supra dictas (viz. that
 “ it left *fermenta morbosa in corpore*, because it cured without evacuation) in
 “ crimen adduci cœpit, & præterea ob pretium pulveris, qui tunc grandi
 “ pecunia divendebatur, paulatim in desuetudinem abiit, donec anno 1679.
 “ Robertus Taber vel Talbot eques Anglus, nova introducta corticis exhi-
 “ bendi ratione, & dosi ejus admodum aucta, non minus felici successu quam
 “ incepto audaci, febribus omnibus prosligatis, Kinæ Kinæ usum sub *Anglici*
 “ *remedii* nomine, vulgo *le remede Anglois*, in Gallia resuscitavit. Hic enim
 “ non intra scrupulos aut drachmas, subsistebat, sed ad uncias & libras ascen-
 “ debat; sicque magnam sibi & remedio famam conciliavit. Summa autem
 “ cura remedium illiusque præparandi rationem, occultabat; ita ut fortasse
 “ adhuc ignotum lateret, nisi Ludovicus Magnus, felicissimo ejus experimen-
 “ torum successu permotus, largam auctori mercedem rependendo, corticis
 “ Peruviani exhibendi rationem, omnibus notam fecisset, jussissetque ut cor-
 “ tex ille undique conquireretur, & ut exercituum nosocomiis totumque per
 “ regnum distribueretur, mandavisset.” *Geoff.* ii. 183.

There have been several lame accounts of this famous tree, as by Bollus in Merton. l. c. Oliver in *Phil. Transf.* No. 290. Arrot. in *Phil. Transf.* No. 446. but for a full, and, I hope, exact description and figure of it, we are indebted to M. de la Condamine alone, which the Acad. Royale has published in their *Memoirs* for 1738, and the editors of M. Geoffroy's M. M. have translated into Latin. As it does not appear to belong to any genus of plants known, Mr. Condamine has undoubtedly a right to name it; which if out of modesty he refuse, I think botanists should do, and call it Condaminea rather than Cinchona.

The fruit and seeds of this tree, as described and figured by M. de la Condamine, differ in nothing from what a curious and learned young physician, Dr. Wm. Horfeburgh, gave me in autumn 1736, for the fruit and seed of the Jesuits-bark-tree. I attempted to raise some of it on a hot-bed the spring following, but without success; and no wonder, since M. Condamine could not make it grow at Quito.

“ The name quinquina is American, but the bark so called in Europe is
 “ known in Peru only by the name of corteza, or cascara de Loxa, or more
 “ commonly cascarilla, that is, the bark of Loxa, or the little bark. But
 “ there is another famous tree, known in diverse provinces of South Ame-
 “ rica by the name quinaquina: it yields by incision an odorous resin,
 “ and its seeds are called by the Spaniards pepitas de quinaquina. The bark
 “ of this balsamic quinaquina is reckoned an excellent febrifuge; and be-
 “ fore

“ fore the Loxa-tree was discovered, it had great reputation in tertians. The
 “ Jesuits of La Paz or Chuguiabo used to gather it with care, and send it
 “ to Rome, where it was distributed under its true name quinaquina. It is
 “ very bitter, and was given in intermitting fevers. But the Loxa bark
 “ coming to Europe the same way, this new febrifuge was confounded with
 “ the old, and prevailing it kept the name of the first, which is now almost
 “ entirely forgot. Quin ai, in the Quichoa tongue, signifies, in Spanish,
 “ Mantelilla, Inda, (une mante on cape) a mantle or hood in use among the
 “ natives; and probably, by a metaphor, the bark of a tree; and if so, the
 “ repetition common in that language, quinaquina will signify the bark, by
 “ way of excellency, or the bark of barks.” Thus M. Condamine, whose
 conjecture as to the etymon of the name, seems not improbable; but his
 account of the old quinaquina is new to me. I wish he had told us when it
 came first to Rome; whether before or since the Countess of Chincon’s cure;
 for the oldest description that I have seen of the quinaquina, as well as the
 accounts of its effects, agree perfectly to that at present used.

“ Quin-quinam eandem malunt dicere illi, qui nomen hoc a comite de
 “ Cinchon prorege deducunt.” *Valentini*. l. c. p. 48.

How the natives of Peru first discovered the virtues of this bark cannot
 perhaps be certainly known. We have however two accounts or traditions
 concerning it, one related by M. Geoffroy, and another by M. Condamine;
 and which of them is most probable I leave you to judge. “ Sic, inquit,
 “ forti & observationi debetur corticis Peruviani inventio. Forte quædam
 “ Kinækinæ arbores in stagno deciduæ jacebant & putrescebant. Nemo ejus
 “ aquam præ insigni quem inde contraxerat amarore, gustare poterat. Qui-
 “ dam tamen ex incolis circumdegentibus æstu febrili correptus, urgentemque
 “ sitim largo ejus aquæ haustu depellere conatus, cum siti febrem amisit.
 “ Quod cum expertus fuisset, cæteros febre laborantes eodem uti remedio
 “ suavit. Nec infelix fuit successus. Sic aqua ingrata gustui, salutæris evasit.
 “ Sed cum per tempus, putrefactis arboribus, aquæ vis febrifuga cum amaritie
 “ evanisset, altius hujus amari saporis & febrifugæ virtutis causa inquisita,
 “ eam tandem ab arborum corticibus pendere cognoverunt. Sic incertum
 “ quod fors obtulerat remedium, accuratiori investigatione è tenebris in qui-
 “ bus delitescibat erutum fuit, & postea diligentibus observationibus con-
 “ firmatum.” Thus Geoffroy, i. p. 48.

“ According to an ancient tradition, the truth whereof I will not war-
 “ rant, the Americans owe the discovery of this remedy to the lions, which,
 “ some naturalists pretend, are subject to a kind of intermitting fever. They
 “ say, the natives having observed these animals did eat the quinquina bark,
 “ they made use of it in agues, pretty frequent in that country, and expe-
 “ rienced its salutary effects.” Thus M. Condamine, l. c.

He says also, that “ the quantity that comes to Europe of this bark makes
 “ the Peruvians believe that it is used in dying; and that it happens to
 “ quinquina, as almost to all common and cheap remedies in their native
 “ country, that it is little valued or used in Peru; little in Lima; much
 “ less at Quito; and almost not at all at Loxa. Yea, that at Puerto Viejo,
 “ though not far from Guayaquil, where there is a great trade in it, he did
 “ not meet with one who had so much as heard of that famous remedy so

“ near

"near them." To him I refer you for the description of this tree, the management and kinds of the bark, &c. and to Linnæus, l. c. for its botanical character.

L E C T U R E XLVIII.

S E C T. II.

THE bark, quinquina, attenuates viscid humours, prevents or hinders putrefaction, strengthens the stomach and intestines, promotes perspiration and the free uniform circulation of the blood; and is a divine remedy for intermitting fevers. It is also of great use in the small-pox, gangrene, and mortifications: in hysteric and hypochondriac disorders; in periodical head-achs, tooth-achs, cholics, and in all diseases which have regular intervals, or attack by fits.

"China Chinæ calida & sicca est, vim habens aperiendi, discutiendi, attenuandi, resolvendi, putredinem arcendi, roborandi. Usus est in debellandis febribus intermittibus, & hic quoque Francofurti satis frequens, quod non careat opato successu." *Append. in Sebred. p. 31.* "Menses ciet, obstructions aperit, ventriculum atque genus nervosum universum confortat." *Merton de Feb. Intermit. cap. 7.* "Ventriculum roborat, appetitum languentem excitat, ciborum concoctionem juvat, flatum discutit, vermes necat; nec non etiam urinas & menses promover. Sed maxime commendabilis est sua febres intermittentes profligandi virtute: eas enim, rite exhibitæ, tuto, cito, jucundeque sanant." *Geoff. ii. 185.*

This bark being in Dr. Sydenham's opinion the only specific remedy, strictly speaking, that is yet known, and its effects both singular and surprizing, it is not to be wondered at, that physicians were for some time divided in their opinions as to its safety, and also as to the manner of its operation. For as, on the one hand, some condemned its use altogether, because it did not evacuate the morbid matter; others, because it bred obstructions in the viscera, by its heat dissipating the thinner parts of the humours, and thickening the grosser; others again, because by its narcotic quality it only bound up the spirits, and stopped the paroxysms for a time, which either returned with more violence, or by translocation of the peccant humour into the more noble parts, more fatal diseases succeeded: So, on the other hand, it was as strenuously defended by not a few, though on very different principles; some placing its efficacy in *tenuitate partium ejus*; others in its diuretic, diaphoretic, and cathartic qualities; others in its *caliditas & siccitas*; others in its occult qualities. Vid. *Merton l. c.* whose opinion coincides with the last mentioned; and he is at great pains to prove, that *vi sua alexipharmaca*, it destroys the fermentum febrile, which, according to him, is *quid veneratum vel deleterium in spiritibus dilatescens*. Again we find others have been of opinion that it acted by its bitterness and astringency. Vid. *Hist. Acad. R. 1711.* And Dr. Quincy's long account, "how this wonderful drug displays its virtues," comes to no more than this, that by the subtilty and texture of its parts it attenuates the blood, and by its stypticity

stypticity strengthens the fibres; attributing, at the same time, its most surprising effects to its roughness or astringency. And to add no more, Mr. Geoffroy accounts for its effects by its styptic bitterness and acidity. For, according to him, the efficient cause of intermitting fevers is a "succus ex-crementitius nervis infensus, in sanguine redundans, cujus natura ad salem alcali urinosum proxime accedere videtur, cum partibus quibusdam biliosis, seu sulphureis adustis permixtus:" whence he concludes that the "Energia kinæ kinæ partim ejus styptico amarori, partim acidis, quibus donatur particulis debetur." Now the bark, adds he, being possessed both of styptic bitterness and of acidity, not only blunts the acrid caustic salts, but also strengthens the fibres, restores their tone, and enables them to throw off the morbid matter, either by stool, urine, sweat, or insensible perspiration; "Sicque sæpe cathartici, diuretici, sudoriferi, aut diaphoretici vices adimplet." Thus Mr. G. tom. ii. p. 198. How far these opinions are consistent with the following facts, I leave it to you to determine. I should have told you that Mr. Geoffroy owns that what he proposes, is only a probable conjecture. Let us now examine if by any means we can discover the primary effect of this medicine, on which its specific virtues depend. In order to which, I observe,

1. That the bark is very bitter, but neither nauseous like aloes, nor so very bitter as gentian or wormwood: the bitterness is not immediately perceived, but continues long in the mouth; insomuch that after chewing a little of it, though kept more than 20 years by me, the bitterness continued perceptibly on the tongue full three hours. It is also aromatically musty; but scarcely astringent. I have attentively tasted many samples of it, and of different ages: sometimes I could perceive no stypticity, at other times a little roughness, or dryness on the tongue; and at other times it appeared subastringent, like dried sorrel roots. That which was most astringent, was the thinnest, and most recent, so far as I could learn. "Fateor quidem levem quandam astrictionem, sive austeritatem cortici inesse, &c." *Morton*, lib. i. p. 51. "Genuinus cortex, sapore satis grato, & aromatico-amaro est; injucunde amarus, & intense acerbus, pro suppositio habendus est: genuinus odorem spirat peculiari modo mucidum, attamen suavem, gratum, & aromaticum; atque huic sensui, in corticis sinceritate deprehendenda, præ cæteris omnibus credere soleo." *Id.* p. 66. Besides it does not act on a solution of green vitriol, as vegetable astringents do. For I infused the powder'd bark in a weak solution of this vitriol for some time; it did not turn purple or black, but beautifully green. The solution of vitriol had the same effect on infusions, of both more recent, and of old bark, made with boiling water, and long macerated in it. Spirit of vitriol or of vinegar destroyed the green colour. The first infusion being poured out, and fresh boiling water added (and this repeated many times) the solution of vitriol dropt into each made them green, but gradually fainter for some time, till at last it had no effect. Hence more is to be expected from the bitterness than the astringency of the bark; and it acts more like an alkali, than an acid on the solution of vitriol, from which it caused a precipitation after several infusions.

2. That though the bark soon and easily communicates some of its bitterness, &c. to water, yet how long and how often it must be infused, yea decocted,

cooled, before it becomes insipid, I have not yet found out. I poured upon corticis *Sv.* gr. ij. broken into small bits, aquæ bullientis \mathfrak{z} vj: in less than a minute it tasted bitter. After it had stood two days, the infusion was of a whitish, or whey-colour, bitter, and aromatically-musty, like the substance: it only diluted syr. violar. and gave tincture heliotropii a wine-colour; the mixture next day precipitating a crimson sediment, which was dissolved by a few drops of oil of tartar, p. deliq. the mixture becoming of a blood-red colour and transparent. So though it reddened the tincture of turnsole, it did it but little, and an alkali added reddened it more; which therefore can scarce be attributed to its acidity. One argument for the acidity of the cortex advanced by Mr. Geoffroy is this, "Infusum corticis chartam cæruleam, (which else-
" where he calls chartam succo heliotropii tinctam) subrubio colore inficit." *Mat. Med.* ii. p. 185. I soaked in this infusion a piece of the blue paper with which sugar-loafs are commonly covered, for a whole night, and it was so far from being red that it had lost its purplish cast, and become grayish, or of a worn-out and faded blue colour. Oleum tartari gave the infusion an urinous smell, though not strong, and turned it first yellow, and afterward red like saffron. With solutio vitrioli it became green, transparent and clear at first, soon turbid; and then precipitated a little of a dark gray sediment, which some drops of the sp. vitrioli dissolved, clarifying the mixture. Spirit of vitriol only diluted the infusion.

Some days after I poured off the remainder of this first infusion, washed the bark with cold water, and then poured on it aquæ bullientis \mathfrak{z} vj. When it had stood some days macerating, I renewed the former mixtures, and had the same phænomena; the colour and taste the same. I repeated the washings and fresh boiling water, a second, and third time, and I do not remember how often more, for the space of nine months, suffering the bark to soak in the water, sometimes several weeks together. And yet the last infusion continued bitter and whitish coloured. And having well dried the remaining bark, it weighed \mathfrak{z} ij. gr. xix: so that the water had extracted thus gr. xxij. *i. e.* a little more than one fifth. These 79 grains remaining of the bark I wrapt in a clean linen rag, and decocted full four hours in water, then dried and weighed it. This was repeated once and again, a week always intervening. The weight of the bark was diminished by the first decoction, gr. iv. by the second gr. jß. and by the third gr. j. So there remained gr. lxxijß. gr. xxixß. being extracted or lost, by all these infusions and decoctions. There were about \mathfrak{z} ij. of each decoction. All were bitter. The first was deeply tintured, the last much paler. The remaining corticis gr. lxxijß. infused in alcoholis \mathfrak{z} xij. for forty days, and then dried, weighed gr. lxxijß. and so lost ponderis gr. iv. I should have noticed that the solutio vitrioli made the first decoction a little turbid; scarcely altered the third; but both in a day or so, thus mixed, let fall a little of greyish sediment, which on the infusion of vinegar dissolved, but sp. vitrioli made the mixtures more clear. And after all, the bulk texture and firmness of the bark seemed nothing altered; but its colour was darker and more reddish. I also repeated the infusion of corticis pulv. \mathfrak{z} ij. in boiling water ten times; and made the former mixtures: the appearances were the same; to the last it was wheyish-coloured and bitter. I likewise infused corticis pulv. \mathfrak{z} ij. in spir. vini Gallici \mathfrak{z} ij. in about five minutes it was more deeply tintured than the first infusion, of other \mathfrak{z} ij.

of the same powder, in boiling water, after it had stood several days. After fourteen days I filtered it, and dried the powder; it weighed Div. gr. viij. so extracted by the brandy vj. gr. xij. Brandy therefore, without heat, in fourteen days time, extracts near as much from the bark, as the water did by all the former infusions and decoctions in nine months, wanting about a fifteenth part only, or, more exactly, a sixteenth part: for as the brandy extracted from 120 grains pulveris 32 grains, so water would extract from the same quantity, but $34\frac{1}{2}$ grains, for $120 : 34\frac{1}{2} :: 102 : 32.$ nearly.

Hence we see (α) that the dissolvable part of the bark, is to the undissolvable part, nearly as 3. to 10. (β) That the dissolvable part is more easily extracted with brandy than with water. (γ) That so long as the bark in substance continues in the *primæ viæ* it will be still impregnating the juices therein contained, and consequently the chyle, with the virtues of this dissolvable part. And (δ) that this dissolvable part is much more sulphureous, than saline or mucilaginous. If, as Mr. Geoffroy says, one fourth part of the bark is rosin, (vide *Mat. Med.* ii. p. 185.) which I would rather call sulphur, there will be more than three parts of rosin for one part gummy or saline. To examine how far this proportion is just, I infused corticis pulv. zj. in alcoholis purissimi zj. and after it stood, sometimes near the fire, and sometimes in the window, for twice forty days, I found that it had extracted gr. xxxij. that is above a fourth part of the whole, and consequently about gr. vj. less than both water and spirit separately drew. I had formerly infused corticis pulv. zj. in alcohol zj. for forty days, cold in a window; then filter'd, and had of residuum well dried gr. xliij. the spirit having extracted gr. xvij. (The rosin, or sulphur, crumbles into a powder: nor is it easy to give the extract a tolerable consistence.) Hence in corticis zj. there are sulphuris, or extracted by alcohol gr. xvij. saline and gummy gr. ijß. and terrestrial parts gr. xlß.

"Phil. Adol. Bohmerus in Dissert. de Cort. Cascarillæ, p. 30. ex cort. zj. extracti aquosi primi zj. ferme; & extracti spirituosi primi zj. se impetratæ perhibet. Newmannus, ex cort. zj. extracti spirituosi primi gr. xxxvijß; aquosi secundi gr. xxijß; aquosi primi gr. xxxijß; spirituosi secundi gr. xxijß, obtinuit. Ego autem extracti spir. primi vj. gr. xij. & aquosi primi gr. xxxvij. impetravi. Bohmerus non tantum digestionem, sed etiam coctionem subjecit." *Cartheus* ii. 522. & p. 526. Tota juvandi ratio, says he, ad absterfionem (parte gummosa) & adstrictionem (parte resinosa) redit. How true will presently appear.

3. That the chemical analysis neither explains, nor confirms any of the virtues of the bark; none of its principles separately, nor all conjoined, being equally efficacious with the substance. Vide *Pitcarnii Dissert.* But since it is brought to prove that the bark contains multum salis acidæ, let us see whether that conclusion can be drawn from it. "Quinquinæ zxxxij. distilled by a retort, yield of spirit and phlegm zxxj. of black fetid oil zjß. and of fixed alkali salt zj. " *Lemery Chym.* 597. "Analyfi chymica, kinæ kinæ crassæ contusæ zjvß. Phlegmatis acidæ zj. zjvß. suppeditarunt: quarum priores portiones solius acidæ notas præbuerunt, posteriores vero non solum intensi acidæ, sed etiam alkali urinosi signa exhibuerunt. Nam heliotropii tincturam cæruleam in rubrum liquorem mutaverunt, nec non etiam sublimati solutionem turbidam & lactescentem reddiderunt, & ex ea pulverem albam

"precipi-

“ precipitaverunt. Deinde olei crassioris consistentiæ & axungie porcinæ
 “ similis ʒj. gr. lxxij. prodit. In retorta residui nigri pondus fuit ʒj. ʒij.
 “ gr. viij. Calcinatum vero ad albedinem pendebat ʒj. gr. xv. a quo salis fixi,
 “ non mere alcali sed nonnihil falsi ʒʒ. per lixivium extracta fuit. Unde li-
 “ quet hunc corticem multum salis acidi, & olei crassioris continere, perpa-
 “ rum terræ, cum tantillo salis urinosi.” *Geoff. ii. 184.* So they differ in the
 oil, and fixed salt: and I am afraid the phlegma’s reddening the tinctura helio-
 trophi, especially while it precipitated a solutio sublimati, will not prove it to
 be intense acidum. Besides, the phlegma, oleum, & carbo, making all to-
 gether but ʒij. gr. xl. (which wants more than a third part of the ʒiʒʒ.)
 there is here probably some mistake. I calcined some bark (ʒij gr. xxvj)
 in a crucible, by which it was reduc’d to about a 36th part (gr. iv.) from
 which I made a lixivium, which dried afforded of earth no more than a 58th
 part (gr. ijʒ.) and fixed salt (all alcali) a 98th part (gr. jʒ.) I suffered the
 lixivium to evaporate to dryness in a window in a tea-cup, and it appeared
 like paper cut into the figure of branches and leaves, very small, regular and
 beautiful; but after some time, the air becoming moist, it dissolved. — *N. B.*
 Not much different from Mr. Geoffroy’s proportions.

4. That the bark may have considerable influence on the blood and hu-
 mours, appears by Dr. Freind’s and Mr. Leeuwenhoek’s experiments. For
 according to Leeuwenhoek, (α) An infusio corticis in rain water, mixed with
 blood new drawn from his finger, divided some of the red globules into
 the constituent smaller ones; and coagulated others. “ Adeo ut (says he)
 “ multis in locis, non alios contemplarer globulos jacentes, quam qui nu-
 “ mero sex unum globulum sanguinis conficerent. Ac quoque particu-
 “ las sanguinis conspexi jacentes quæ tam parvæ erant, ut duntaxat vi-
 “ gesimam sextam partem unius globuli sanguinarij esse judicaret. Præ-
 “ terea, aliquibus in locis, globuli sanguinarij in sese jacebant coagulati;
 “ quod ortum esse judicabant, ex frigido humore, qui ad calidum accesserat
 “ sanguinem.” (β) A tincture of the bark in spirit of wine, mixed with
 blood as above, immediately coagulated many of the globules, while many
 others were divided into the six smaller ones. (γ) The chymical oil of the
 bark suddenly coagulated some of the globules of the blood, but made others
 so clear, that it was easy to number in some three, in others four, and in others
 five of the smaller globules of which they consisted. But the infusion of the
 caput mortuum made no change on the globules. Vide *Leeuwenb. Continuatio*
ad S. S. (Nov. 28, 1687.) p. 119. And Dr. Freind says, that (α) a strong in-
 fusion of the bark in wine, mixed with fresh arterial blood of a dog, “ Sum-
 “ mam ei fluiditatem, & colorem elegantissimum conciliabat.” But that a
 tincture of it in spirit of wine had the contrary effect. (β) That a decoction
 of the bark made the serum sanguinis humani more fluid, than a decoction of
 favine, gentian, or sarsa; or than sp. salis ammoniaci, c. c. or the like, could
 do. (γ) That decocti fortissimi ʒjʒ. injected into the jugular vein of a dog,
 in ¼ horæ caused strong palpitations of the heart, and frequent spasms: and
 ʒʒ. more being injected, he died tetanous. That upon opening the crural
 and axillary veins, issued sanguinis rutilans & liquefens: the day following
 the lungs were red and turgid; in the right ventricle of the heart, sanguis
 plurimum accumulatus, & proinde compactus; in the left ventricle little blood,
 and that very fluid; and from the jugular vein also, ran blood thinner and

more liquid than in a natural state. Vide *Freind's Emmen.* c. xiv. Can we thence infer that it attenuates, or that it coagulates the blood? But that such a small quantity of the decoction, (if filtered, warm, and slowly injected) should kill a dog so soon is somewhat extraordinary.

5. That no infusion or decoction of the bark is so effectual in stopping intermitting fevers, as is the powder in substance. For not only old and carious bark has been found as successful, as the most recent in Britain; but also the substance to cure, when the decoctions, &c. failed. “*Propria experientia testor, me ante 20 annos, cortice trunci sæpe usum esse, ad crassitiem & latitudinem volæ manus magnis & profundis sulcis, & fissuris conspicuo, velut in vetusto arbore imo eundem aliquando valde cariosum, putridumque, ex necessitate, quod melior nullo pretio tunc temporis haberi potuit; & olim & nunc me vix unquam frustravit eventu optimo & desiderato: maxime si ejus modus & tempus exhibitionis rite observantur.*” *Lister de Hydrop. Mant.* §. ult. p. 56. “*A D. M. Lister edoctus sum pulverem corticis vetustioris, experientia propria, non minus efficacem esse ad profligandas febres, quam recentis; aliquo etiam respectu commodiorem: siquidem diuturnitate temporis, vis illa cathartica, quæ in recenti observatur, & aqueæ, ut verisimile est, parti inhæret, paulatim evanescit.*” *R. H.* 1797.

“*Quicquid dicit Ant. de Heyde (ait D. Hulse) ego, aliique medici, quibuscum consuetudinem habui, corticis pulverem in substantia exhibitum, efficacissimum esse semper comperimus, etiam adversus contumacissimas febres, quæ infuso ejus minime cedebant. Quin & D. Lister mihi asseruit, infusum nihil valere, totumque ejus operationem, subtilioribus pulveris partibus, in liquore adhuc a defæcatione residuis deberi.*” *R. H.* l. c. Hence all its virtues do not solely depend on its dissolvable, or more volatile part.

6. That the most fixed part, or what remains after long infusion, decoction, &c. has been often found as effectual in stopping agues, as the fresh powder. “*Quidam totam vim chinæ chinæ in parte hujus corticis volatili repofuere. Verum non semel totam tincturam, atque etiam amaritiam corticis per iteratas, easque longas, tum coctiones, tum macerationes, in ipso spiritu vini, aut aqua sale tartari, absynthii, aliisque acuata, extraxi; non sic tamen minus, quod restabat corporis illius corticis, insipidum prorsus, ac tanquam caput mortuum, febres restinguebat, dum illud largo exhibebam dosi: imo minus molestiæ sæpius creabat stomacho, quam si crudum corticem obtulissem.—Tincturæ autem omnes, quas sive per coctionem in aqua sale tartari acuata, sive per digestionem in vino spiritu vitrioli aut sulphuris animato, sive per ipsum vini spiritum, sale ammoniaco impregnatum, aliæque plures quas elicui, effectum suum ad tempus tantum præbuere.*” *Mangeti Bib. Pharm.* ii. p. 679. “*It loses indeed most of its bitterness by infusion, but its roughness remains; and upon trial it hath been found, that if it be then powdered, and given in substance, it will make a cure as effectually, as when given before such infusion.*” *Quincy, Ph.* p. 159. It is certain that its roughness is sooner lost by infusion, than its bitterness; but that it cures agues after it has been decocted or infused, seems to be unquestionably true. Dr. Jo. Lermont tells me that some years ago when that disease was epidemical here, he used to powder the decocted bark, and cured many poor people with it.

Does it not hence follow, that the virtue of the bark in agues is more owing to its fixed, than to its volatile parts. It is true indeed that it may be long, yea often decocted, and yet retain part of its bitterness: but it is no true, that the first decoction extracts so much of it, that if its energy was proportionably diminished with the bitterness, the dose of the decocted bark would be so great, that I do not see how its effect, in this state, could have been discovered, nor how the sick could swallow it down. But it is positively asserted by Mangetus, that it cures after it is rendered altogether insipid, and *quasi caput mortuum*, given in a large dose. That an ounce of the decocted bark will be as effectual as an ounce not decocted, I cannot say; but I think it probable, that the dose of the one need not be very much greater than that of the other, as will appear below. But the substances succeeding after decoctions, tinctures, &c. fail, demonstrate its effects thus are not owing to its bitterness or stypticity remaining. To explain the manner of its operation therefore, its styptic bitterness and acidity can be of no use, as might many other ways be demonstrated. "Equis præter unicum Conringium, in salubris hujus pharmaci parte terrestriori, portiunculas quasdam deleterias et febriles, in subtiliori vero febrifugas delitescere, contra universalem experientiam, vel somniando hariolatus est? Febres sane substantia corticis citius ac certius, quam quacunque speciosissima ejus tinctura, extracto, vel elixiri, fugari, atque fugatas, ad recidivationem minus aptas esse, certo certius constat." *Morton. l. i. p. 53.*

7. That this most fixed, terrestrial or woody part of the bark, appears to be altogether indigestible in the stomach; that is, not to be so dissolvable as to enter the lacteals. For (α) if after the ague is stopped by it, the patient falls into a purging or vomiting naturally, or procures either by medicines for some weeks, the fever commonly returns; especially if the bark was taken too soon. "Vitandæ ante omnia evacuationes qualescunque, cum vel blandissima catharsis, quin imo enema ex lacte saccharato, in morbi discrimen certissime, forte in morbum ipsum denuo ægrum conjiciet. Etenim curatio cum huic remedio ininitur, purgatione nec eget, nec eandem plane fert." *Sydenb. epist. i. respons. p. 306.* "Ab usu catharticatorum, vires naturæ & antidoti tranguitur, & venenato fomite inde repullulante febris sæpe numero revirescit, quod vel ab enemate cathartico, non tantum post quatuor dies, verum post tot hebdomadas injecto, evenisse sæpius memini. Quocirca a corticis usu, ego, nisi evidenti indicatione coactus, nusquam intra quatuor dies, ne quidem hebdomadas, vel menses, donec, ex appropinquante sole, tempestas anni immutetur, solennem evacuationem instituere ausus sum; aut saltem facti me pœnituit, nisi toties quoties hoc malum, repentina corticis repetitione, averruncassem." *Morton. l. i. p. 69.* About 18 years since, a strong healthy man, aged about 30, was cured of a tertian by the bark. But after he had been eight days well, he took a vomit, and next day relapsed. He again got the bark, recovered, took a vomit about a week after, and the fever returned. Recourse was had the third time to the bark, and with equal success; and though a vomit was again administered, he continued well, is still alive, and in good health. Was he the better or the worse for the vomits? But moreover, (β) if I am not misinformed, the powder has been vomited up 14 days after it was taken. A gentleman of good sense,

señse, and whose veracity I never had reason to suspect, giving an account of a swelling in his legs, which he was frequently troubled with, told me, that when he was in England he had long laboured under a quartan, and had stopped it with the bark many a time, for two or three weeks, taking large quantities of it; but after that he commonly grew sick, and vomited, and the fever returned. And he assured me, that he frequently threw up the powder, little altered, 14 days after he had swallowed it; and that he was too well acquainted with it, having taken several pounds, to be mistaken. However his quartan continued so long, that his constitution suffered much by it: for though not long after his returning to Scotland, he got rid of his fever, the effects of it continued many years. At length, he was seized with the gout, took a quack remedy brought from London, and died in excessive agony in two or three days.

Hence I infer, that in order to a compleat cure, it is commonly necessary the powder should continue for some time in the primæ viæ; viz. longer or shorter, according to the nature and circumstances of the fever; and also that it prevents the returning of one or more paroxysms by acting, some way or other, on or in the stomach and guts.

8. That if after an ague has been stopped by the bark, it returns, the effect of the medicine is lost as a specific; and it will require as much to compleat the cure, as it would have done had he taken none of it before. Indeed, if the force of the disease is so far broken, that, when stopped, it would of itself cease after a few paroxysms and evacuations, cold or the like causes the relapse; a much smaller quantity, with proper management, may compleat the cure. But I have observed, that when the bark is taken in the beginning of the disease, or sooner than it ought to be, and the paroxysms return, after a week or two's intermission, they are then, especially the first, more severe than ever, and require rather more of the powder to prevent a relapse, than they would have done, had not the fever been interrupted. A remarkable instance I was witness to in 1728. A robust young man, about 25, had a regular tertian, suffered several paroxysms, for which he took vomits, &c. and at last the bark, without my knowledge, and contrary to my advice. When I visited him after it, he was quite free from the fever, and thought himself perfectly well. I told him I feared a relapse, and the best way to prevent it, if possible, was to take another ounce of the powder in three or four days time, beginning the eighth day after the last fit. He followed this direction; yet, notwithstanding he had taken about half the ounce in two days, the ague returned, and the first fit lasted, as he said, twenty hours, and was so severe, that he thought he suffered as much in it as he would have done in all the fits put together which the bark had kept off. This made him patiently suffer, till I thought it safe to have recourse to the powder, which then effectually cured. He is still in perfect health, and never had the least aguish symptom since. Vid. *Sydenh.* p. 263. where treating of the continued fever, ann. 1661, &c. he says, “ Porro observatu dignum est, quandoque accidere, “ ut æger clysterum, aliorumve catharticonum usu, circa declinationem morbi “ intempestive præscriptorum, parum alleviari videatur, imo nonnunquam “ apyrexia omni modo frui; post diem autem unum alterumve senties, non “ tam pristinam febrem vires suas redintegrasse, quam novam accendi; rigor “ nimirum

“ nimirum atque horror subito invadet.—Cum ita se res habeat, non aliter tractandus est æger, quam si antea febre non detentus fuisset,” &c. Thus Sydenham.

May it not hence be inferred, that the specific virtue of the bark in agues depends neither on its immediate action on the animal juices, as an alterative; nor on the morbid matter as an attenuant, either sensibly or insensibly? By its specific virtue I understand that quality, by which, when duly administered, it certainly prevents the return of so much as one paroxysm more; which quality is peculiar to the bark, and to it only when given in substance, so far as I know. The manner how it thus operates is what I have principally been inquiring after. If it cured agues only by degrees, it would not be so remarkable: bitters, &c. have done that long before it was known; though perhaps even thus its volatile part exceeds them all, yet such effects being much the same in kind, may be called its common or less specific virtue.

Now since it appears that the most specific virtue of the bark is not lodged in its volatile but in its most fixed parts; that it sometimes stops agues, or keeps off the paroxysms only so long as it remains in the stomach, or in the intestines; and that relapses, after taking it, destroy all its effects as a specific; *Queritur*, and I leave it to the learned to determine, whether the most surprising and specific virtue of this remedy does not solely depend on, or flow from, its action on the primæ viæ? And whether this action or impression on the primæ viæ is not in some measure analogous to that of febrifuge cataplasms, epithems, or such-like applications on the surface of the body?

The affirmative perhaps will not seem altogether incredible to such as consider, that some remedies very opposite in nature, as well as others apparently very insignificant in their operation, have been many times equally successful in this disease. For agues have been cured by a surprize, or such-like sudden impression on the mind; by abstinence, as well as by excess; by irritating sinapisms, as well as by innocent plaisters; by emetics, mercurials, bitters, astringents, &c. What a variety of remedies are used in Egypt in this disease! Vid. *Alpin. Med. Ægypti*. l. iv. cap. 15. fol. 146. *N. B. Dr. Simson's oculi cancerorum*. And is it not as difficult to conceive how an external application, e. g. a cataplasm to the wrists, or plaister to the stomach, should stop an ague, as how an internal one should do it? The effect of the bark in clysters is sufficiently attested; and the late learned Dr. Dickson told me he had often used it with success in epithems. “ An & externe quid valeat, si cum sapone nigro in cataplasmatibus forma carpi applicetur, quod haud ita pridem non nemo asserere non dubitavit, illud certo prius confirmare non audeo, quam iteratis experimentis ex ipsa praxi habeamus compertum.—Prorsus vero curiosum est in cytheribus adhibitam kinkinam eundem effectum edere, id quod haud ita pridem in peculiari libro ex Italia mihi communicato, traditum & observatum fuit, cujus titulus “ La Kina Kina, &c. Parma 1694.” *Valentini*. l. c. p. 58. But it may be said, if the indissoluble part of the bark applied in sufficient quantity to the internal surface of the stomach, stops agues, or prevents the returning of the paroxysms, why should not every such indissoluble stuff have the same effect? If exactly of the same texture, and density, and mechanical figure of its particles, when reduced to a powder, I own I see not a reason why it should

should not. The structure of the bark has in it something singular, as described by M. Leeuwenh. l. c. who says, cinnamon in this comes nearest to it of any bark he knew, yet still there is a difference. However, if cinnamon, after all that is volatile or dissolvable is drawn from it, given in powder is found to stop agues, it will confirm the former reasoning. The experiment is safe, and worth the making. I wish also it were tried, whether ash-bark, oak-bark, cortex elaterii, the lately imported cortex febrifugus Jamaicensis, galls, or the like, decocted till they were altogether insipid, and given in as large quantities as the cortex is, would prove such febrifuges as it does. But, whatever is in this,

Daily experience proclaims the Peruvian bark to be the safest, as well as the most certain and efficacious febrifuge the Materia Medica can yet boast of, as well as a most valuable remedy in many other deplorable diseases; its use in some of which is but lately discovered, and perhaps all its virtues are not yet known. In its volatile or dissolvable part are centered the virtues or qualities of bitters, corroborating aromatics, antiseptic balsamics, yea and cordial analeptics. For as Dr. Sydenham observes, in *Dissert. Epist.* p. 412. from his own experience, "Peruvianus cortex eximias mirandasque vires, in sanguine & spiritibus confortandis invigorandisque, habere nonnunquam deprehenditur, cujus (adds he) ʒj. mane & sero ad septimanas aliquot deglutitum sanam firmamque corporis crasin (tam. viris hypochondriacis, quam hysteriis foeminis, diu multumque ægrotantibus, dejectâque jam quasi corporis œconomia) restituisse ipse observavi." This enters the lacteals, and though more slowly, yet as certainly, and perhaps always (at least sometimes) more safely cures intermitting fevers, than its more fixed part, because it seldom puts a stop to the paroxysms till it can be done with safety. The infusion per se, or with other bitters, is not only sufficient for the cure of most vernal agues, but is also of signal use in preparing the patient for the powder, even in autumnal quartans.

I hope I am not mistaken as if I had asserted, that the bark continues always two weeks, or even one week, in the primæ viæ, and that if it be sooner discharged, the fever will return: far from it. But what I think deduceable from obs. 7 and 8. is, that it may stop an ague so long as it remains there in sufficient quantity, and no longer; and also that the more obstinate the disease is, and the sooner the substance is given, its action on the stomach and intestines must be the longer continued in order to prevent a relapse. Thus, for instance, whereas a vernal tertian, which would have gone off of itself, or with the help of bitters only, after a few paroxysms, may require no more of the powder than is sufficient to stop so many fits; yet an autumnal one, and much more a quartan, which might last many months, requires much more of the remedy, and the use of it to be much longer continued, to compleat the cure.

Were it necessary, I could give many instances of the success and safety of this medicine, from my own experience, sufficient to answer all the objections hitherto made, or that can be made against it. I have given it to infants, and been surprized to see how pleasantly they took it, even in electuary: I have given it to a woman in the seventh month of her pregnancy; to a man about 70; in a word, to young and old of both sexes, and always with as much

much success as I could wish; all in agues, two of which were autumnal quartans, a disease rare in this country. "Ego fidenter dico, idque postquam jam ad 25 annos quotidiano usu ejus vires explorando expertus sum, me nusquam novisse aliquid mali ab usu corticis cuiquam evenisse præter surditatem aliqualem tempore usus molestam—quam sponte ilico, a morbo evicta, vel pulveris omissione cessare semper observavi." *Morton*. l. c. p. 51. I never knew any ill it did, if interrupting or protracting the fluxus mensium for a few weeks be not so called, which a woman's continuing to take it during the time that discharge should have happened occasioned, and which returned of itself without any bad consequence.

Dr. Morton found the bark useful in the small-pox, and frequently gave it in the declination of the confluent kind. Vide *Exerc. de Variolis*, cap. 10 & 11. *Hist.* 22, &c. And its success in promoting the maturation of the pustules, as well as in mitigating the secondary fever, has of late been frequently experienced. Vid. *Med. Ess.* vol. v. art. 10. Its effects in gangrenes and mortifications, though more lately discovered, are more fully confirmed by a variety of experiments. And in such cases, if the fever be duly moderated, the indicatio vitalis answered, and, where needful, proper topics applied, what more can be done to forward the cure? Now the bark, judiciously administered, both moderating the fever, and invigorating nature, and, as it were, embalming the juices, it is but a reasonable conclusion, that it must be of great use wherever a laudable suppuration is wanted; of which we had not long since a signal instance in our infirmary. A man had his foot so bruised and crushed in a quarry that amputation was necessary: Two or three days after, the stump looked ill, spasms and convulsions seized the muscles of the face, and he appeared to be in great danger: Recourse was had to the bark, which had the desired effect, as in a few days all the bad symptoms went off, and the cure went on well.

But we must not hence infer, that the bark is proper or safe in continued fevers. Mr. Talbot is said to have made the experiment; but little to his own credit, as it was fatal to the sick. Vid. *Rem. Angl.* p. 93. "At in peste atque epidemicis continuis, quæ eandem ordine excipient, debellandis, non alios effectus ex corticis peruviani usu expectare licet, quam eos quos hodie (1685) in pleuritide, peripneumonia, angina, & id genus febribus inflammatoriis videmus, quibus non tantum non prodest, sed plane obest." *Sydenham. Epist. resp.* 1. p. 317. I never knew it do any good in fevers with night sweatings, unless they were aguish: And I have not tried it in the chin-cough, well knowing that the more efficacious a medicine is, there is the greater danger in misapplying it.

The bark has been commended also in hectic fevers; but I do not know that ever it succeeded in that disease: yet I was witness to a very remarkable effect of it in a consumption of the lungs, accompanied with such a fever and gross spitting, in a young lady about twelve years of age. As the last effort, an electuary with the bark in substance, and I think some balsamics in it, was ordered by Dr. Eccles, senior, (in 1710 as I remember). She had not taken it above a day or two at most, when the hectic frequency of the pulse was quite removed, and I believe the night sweats also; the expectoration

also was much diminished. However, in a few days all the symptoms returned with more violence, and the apparent respite seemed only to hasten her death.

LECTURE XLIX.

SECT. III.

THE Peruvian bark is given in powder to $\mathfrak{z}\text{ij}$, in infusion or decoction to $\mathfrak{z}\mathfrak{ss}$, in extract to $\mathfrak{g}\text{j}$. Of spirituous tinctures $\mathfrak{z}\text{j}$. cannot be well exceeded as a dose, or at one time: or rather, the dose being to be repeated sometimes twice or thrice a day, it ought to be given in such quantities, and at such intervals, as the sick can bear, and the disease requires.

But to be more particular: in intermitting fevers the dose of the bark is of three kinds. 1. The quantity that can conveniently be taken at a time (with regard to which it differs not from other medicines of the like specific gravity); $\mathfrak{z}\text{j}$. need seldom be exceeded. 2. The quantity sufficient to prevent the return of the next paroxysm; and this varies according to the genus of the fever, a quotidian commonly requiring at most pulveris $\mathfrak{z}\text{ij}$. a tertian $\mathfrak{z}\mathfrak{ss}$. and a quartan $\mathfrak{z}\text{j}$. These divided into drachms, or into smaller quantities, and taken at proper intervals during the intermission, will seldom fail to answer this intention, and give time to take the third dose, that is, as much as is necessary to prevent a relapse, or compleat the cure. In order to which, quotidiens commonly require pulveris $\mathfrak{z}\text{j}$. tertians $\mathfrak{z}\text{ij}$. quartans $\mathfrak{z}\text{ij}$. vel iv . including what was taken to prevent the first paroxysm, and giving of what remains $\mathfrak{z}\text{j}$. or so, twice, thrice, or four times a day, till all be consumed. And there being here more danger in the defect than excess, it is sometimes necessary, and always safe, after a week or two, to repeat this third dose once or twice in quartans. Smaller quantities indeed frequently suffice, much depending on the state of the sick, and of the fever. But if after all the ague returns, it is certain the bark has been given too soon: and without suffering the paroxysms to continue for some time, and using other remedies, it will be in vain to attempt a cure by it, and much endanger the patient's constitution.—As for the quantity of it to be taken in decoction, &c. I can only say, that when an ague is thus to be cured, the use of it must be continued till that end is accomplished, be the quantity what it will.

The powder may be taken in wine, or made into an electuary or pills, as the patient likes best, and a glass of wine taken with every dose. Any syrup may serve as a constituent, without any other addition, unless it be laudanum to prevent its purging. “Cum sane, qui aliquid cortici adjiciunt; præter vehiculum eidem in ventriculum transmittendo necessarium, aut ex ignorantia peccant, ut mihi videtur, aut dolo malo, a quo vir probus ex animo abhorrebit.” *Sydenham. Epist. resp.* 1. p. 308. The extract is drawn first with sp. vini rect. and then with water. What is meant by $\text{salis tartari parum}$? *Pb. Ed.* 149. The *New London Dispensatory* takes water only, and repeats the decoction till the liquor remains transparent when cold: A tedious process!

The *Cod. Medic.* makes the decoction in wine and water for two hours (in *edit.* 1748, water only is ordered, vide p. 56.) and once only. I would prefer digestion in brandy to them all.

That the bark may be too soon taken in agues I think is both consistent with reason, and confirmed by experience. I know the contrary is the opinion of some learned physicians; for, say they, the longer the disease continues, the patient is the more weakened, the cure the more difficult, and the consequences the more dangerous. And indeed if such fevers were always hurtful to the constitution, and it suffered more by their continuing any time, than by their being stopped in the beginning, it could not be given too soon. But this is not the case: they are not seldom to be looked on as remedies, rather than as diseases. As in the gout, the pain inflammation and swelling of the feet are not the main disease, but a critical metastasis, in order to its cure; so intermitting fevers are commonly the instrument nature uses, or the consequence of the effort she makes, to concoct or expel something, which otherwise would prove more hurtful and perhaps fatal. And though this should not be the case in every ague, yet certainly it is in such as are properly called sympathetic, where the ague is not the principal disease, but nature's attempt to cure it. In such cases nature is to be assisted, not disarmed, or deprived of these salutary paroxysms, till the main enemy is overcome; and then she will easily be prevailed on to quit her weapons, and the fever may safely be cured. Agues have rectified many faulty constitutions, and cured many obstinate diseases, which all the power of art could never otherwise have reached. Mr. A. K. a student in medicine, about 20 years old, in November 1724, was seized with a tertian. The first day he had a very regular fit; the second he was quite free of the fever and very well; the third a paroxysm somewhat more severe than the first; for it (or the third, I do not well remember which,) began with vomiting, which brought up more than a pound of undigested and mucous stuff; and then followed the cold, hot, and sweating fits in their order. The free day following he took a dose of ipecacuanha, which operated very well, but no mucus appeared. The next paroxysm began as the foregoing did, with vomiting up an equal quantity of the mucous stuff; and thus he continued to do for ten or fourteen days, (using some bitters and a good diet all that time,) throwing up more or less of the mucus every fit. At last it disappeared; and after a paroxysm or two more, he being very desirous to follow his studies, I allowed him the bark, and he was very well all the winter. He had been for several years threatened every spring and autumn with a consumption: on this account I advised, among other things, that if the ague returned, as probably it would do in the May following, he should take care not to put a stop to it during the summer; but if it continued till autumn, or if it went off of itself sooner, that he should then take the bark, and it would confirm his health. About three or four years after, he came again to town, and told me that his fever had returned that May, that he had followed my directions, and been ever since in perfect health. His looks were so much altered for the better, that I scarcely knew him at first. Now could it have been of any advantage to this gentleman to have given him the bark sooner in the autumnal, or in the beginning of the spring ague? Certainly not. It cannot, at the same time, be denied,

that the bark has been given with safety and success in idiopathic agues in the very beginning, especially when epidemical; but I always thought there was less danger in giving it later than was necessary, even in such agues, than in giving it too soon: for as it is a good constitution indeed which cannot be made better, so I know no way we can discover, with so much certainty, the nature and tendency of the disease, as by a careful observation of its symptoms and progress during the course of several paroxysms.

I shall conclude, as Dr. Willis does, with some remarks on the same subject. “Nunc autem hic pulvis Peruvianus sit unicum adhuc repertum febris quartanæ alexiterion, quod nimirum ipsius aliarumque intermittentium paroxysmos (licet solum pro tempore) inhibet: attamen dubitandum non est, quin alia in rerum natura extent medicamina, quæ sunt æque febrifuga; atque sperandum erit ut novi hujus inventi exemplo ducti, ad explorandas herbarum virtutes adhuc fere ignotas excitemur: ita dum singularium tentamini insistimus, & medicinæ rationali, empirica adjungitur procul dubio quartanæ, aliorumque herculeorum morborum curationes feliciter procedent: quod eo lubentius sæculo huic, aut saltem posteris spondeo; cum manducante corticis istius analogia, medicamentum ad profligandas febres non contemnendi usus, ipse non ita pridem, varia præcurrens adinvenirim quod etiam pauperioribus quibusque, succedanei vice, bono cum successu, propinare soleo.” *Willis de Feb.* cap. 6. The bark has likewise taught us, that where ʒj. or ʒij. only gives respite for a time, ounces will make a cure. If therefore other alteratives were given in such quantities, it is not improbable that greater cures might be performed by them. “Cl. D. D. Elisha Coyn; vir integerrimus, & medicus expertissimus, sæpius sincero animo mihi aſſeruit, sese vires florum chamæmeli, subtilissime pulverisatorum; in vehiculo convenienti exhibitorum, atque post debita intervalla repetitorum, æque felices ac certas in hoc morbo debellando expertum fuisse, ac ipsius corticis Peruviani.” *Morton. de Feb.* c. 6. p. 43. Who likewise says, that by a powder made flor. chamæm. p. ii. salis absinthii, & antimon. diaphor. āā p. i. he cured three intermitting fevers on which the bark had no effect, the only instances in which he ever found it fail. Wormwood-ale, made by infusing the absinthium vulgare in small ale, cured many country people, when the ague was amongst us. And it is not improbable that many other bitters, especially if subastringent, as cortex fraxini, chamædrys, &c. given as the bark is, might prove very successful in this as well as other diseases. *Sed extra oleas feror.*

T A M A R I S C U S.

S E C T. I.

Tamariscus, tamarix, & myrica *offic.* tamarix altera, folio tenuiore, sive Gallica. *B. P.* 485. Tamariscus Narbonensis. *Lob. Ic.* 218. *Adv.* 447. *Ger.* 1378. *F.* 661. T. folio tenuiore. *Park.* 1479. Tamarix major, sive arborea Narbonensis. *J. B. i.* 2. 350. *R. H.* 1704. Myrica sylvestris prim. *Clus. H.* 39. The French or Narbon tamarisk.

It grows in South-France, Spain, &c. with us it flowers in May and also in autumn. The lignum & summitates are reckoned medicinal, but not so much used as the bark. "Ter plerumque in anno floret, vere, æstate & autumno; recentibus floribus, semen jam evanescens, sp. succedentibus. *Clus.* "H. l. c. Edmundus Grindal Archiep. Cant. tamaricem indurati lienis "passionem eximie juvare expertus, primus in Angliam transtulit." Vide *R. H.*

It is a pretty thick dark-brown bark, somewhat reddish within, of a bitterish styptic taste, and no smell except when musty.

It is in Latin myrica, *æ*, myrice, *es*, tamarice, & tamarix: in Greek *μυrica*. Vid. *Theophr.* l. i. c. 16. *Dioscor.* l. i. c. 116. p. 60. "Tamarix videtur Germanicæ originis, ut larix; hinc tamariscus Græcis est *μυrica*, unde Virgilius celebrat humiles myricas. Apud Nicandrum corripitur "media." *Hoffm.* 450. It had many odd epithets among the ancients, as fragilis, sterilis, infelix, damnata, tristis, &c. Of it were made garlands for criminals, as a mark of infamy. Vid. *Bod. in Theophr.* p. 407.

S E C T. II.

It is an astringent, called deobstruent, diuretic, and splenic; and commended for fluxes, obstructions of the viscera, especially of the spleen, diseases ab atra bile, hæmorrhages, &c. "Lignum ad frigiditatem inclinat.—Cortex calcacit " & siccac, attenuat, aperit, abstergit, subastringit, diureticus est, ac splenicus. Usus præcipuus est in obstructione & tumore lienis (quem absumere "scribit Dioscorides,) in morbis ab atra bile & sero oriundis, ut scabie, pruritu, in ictero nigro, profluvio albo mulierum, &c. Extrinsecus imprimis in "tinea capitis, & obstructione mensium (infectu). Præparationes sunt, 1. Extractum e cort. 2. Sal ex incinerato ligno." *Schroder.* 695.

It is not very bitter, but pretty styptic, and makes ink with vitriol. "Datur ad sanguinis excreationes in potu; cœliacis quoque & fæminis profluvio laborantibus, ictericis.—At foliorum decoctum in vino potum "lienem liquat.—Sunt & qui e caudice calices parent, quibus poculorum "vice splenetici utantur, ceu datus in ejusmodi vasis potus lienem conferat." *Dioscor.* l. i. c. 116. p. 60. "Ad lienem præcipua est, si succus ejus expressus "in vino bibatur. Adeoque mirabilem ejus antipathiam contra solum hoc viscerum faciunt ut affirmant, si ex ea alveis factis bibant sues, sine liene "veniri." *Plin.* l. 24. c. 9. p. 614. And it is said, that still they make vessels of the wood, to hold the drink of splenics, in Germany, Egypt, &c. The Arabians commend it for the elephantiasis; and hence it is used in Egypt for the French pox. Vid. *Alpin. Plant. Egypt.* p. 37. *Veslin. in Alp.* p. 13. "The bark is sometimes used for the rickets in children." *Miller Bot.* p. 432. It may be given in infusion or decoction to ʒß. but the dose is not determined.

THURIS.

T H U R I S.

S E C T. I.

Cortex Thuris, Cortex Elaterii, Eleutheriæ cortex, Styrax rubra, Thymiamma Indiacum, & Thus Judæorum, *offic.* Storax rubra officinarum, *B. P.* 452. Thymiamma, sive Storax rubra officinarum, *J. B.* i. 481. Cortex Thuris nonnullis dictus, vel Thymiamma, vel Thus Judæorum, quod Judæi in suffumigiis frequenter utantur. Est corticosum quid ex India allatum, *R. H.* 1841. Thymiamma (officinis corrupte Thymiana, vel Thuris cortex, vel Thus Judæorum, quod Judæi in suffumigiis frequenter eo utantur.) *Schroder*, 692. "Styrax rubra, Græcis hodie Maurocapno. *Bellon.*" *B. P.* "Schakarilla, Chakarilla, *Mont. Exot.* 8. Cortex Thuris *offic.* Elaterii Pharmacopol. vel "Elaterii cortex." *Dale*, 346. Indian bark. D. Eleutherian bark.

"Alia est kinæ kinæ species, quæ kina kina aromatica, cascarilla, shacarrilla & cortex Peruvianus griseus, zagarilla, in officinis nostris dicitur "Eleutheria, *H. Cliff.* 486. Vulgo chacril vel cascarille. Cortex Eleuterii, "Stifferi. Primus qui de hoc cortice mentionem fecit, est *Joan. Andrea Stifferus*, "M. D. & P. in Acad. Julia, qui in actorum laboratorii chymici specimine "secundo, an. 1693. edito, refert, &c." Vide *Geoff.* ii. 202. "Eleutheriæ "cortex, bark of Eleutheria." *Pemb. Disp.* p. 131.

It is a moderately thick bark, commonly in quills, rough and greyish without, iron-coloured within; of a hot biting, bitter resinous taste, and perfumed aromatic smell: its smoak smelling of musk.

The tree probably grows in both the Indies. There is a short description of an elutheria in *H. Cliff.* 486: but I find it not in *Lin. G. Plant.* either first or second edition; nor in *Syst. Naturæ*, edit. 1748. But in his *M. M. & Fl. Zeylan.* it is a species clutiæ, and called clutiæ foliis cordato-lanceolatis, *Fl. Zeyl.* 174. *M. M.* 166. *Sp. Pl.* 1042. & eluteria. N. triviale. — "It is an "unknown Peruvian plant." *Hist. Acad. R.* 1719. "Ex India orientali ad "nos transportatur, nobis autem importatur ex insula *Bahamensi* Americana "Elatheria dicta." *Dale*, 346. — "Ex quibusdam Americæ meridionalis regionibus ad nos affertur, præsertim ex illa regione quæ *Paraguay* dicitur." *Geoff.* ii. 202. — I had it from Eleutheria or Cignateo, one of the Lucaya or Bahama isles, which abounds in it. — "Some reckon six species of the quina, and call the chacril the seventh. It is also called kina-kina spuria, "falsa, urens, odorifera. It is cortex elaterii with the druggists on account of "its biting bitterness, like the elaterium: Chacril from the Spanish chacarrilla or cascarilla." *H. Acad.* l. c. p. 67. — Dioscorides's description of the narcapthum or nascapthum agrees well enough with this bark: but I cannot say to it only. Vide l. i. c. xxii.

S E C T. II.

It is a stimulating diaphoretic, diuretic, carminative, bitter, aromatic, flagogue, cordial, and uterine (may be called nervine) and is of signal use
in

in diseases from an inertia solidorum, or a phlegmatic viscosity of the fluids. Hence it is commended in the palsy, dropsy, vapours, asthma, colic, ague, &c. but little used here. It may be given to ʒj. in substance.

“Thymiana constrictionibus vulvæ ex suffitu prodest. Odoris jucundi gratia & suffimentis immiscetur.” *Schroder*, p. 692. “Nascaphthum, aliis naphthum etiam ex India deferitur. Est vero corticosum mori libro simile; quod jucundi odoris gratia suffitur. Facilitis suffimentis inseritur vulvam quoque astrictam suffitum juvat.” *Diosc.* l. i. c. xxii. totum.

Observe, 1. It is a very acrid, aromatic and bitter substance. A little of it smoked, with tobacco in a pipe, perfumes the place, as with musk, but makes it more intoxicating, and is apt to cause headaches. “Odore dum comburitur, fragrantissimo, aromatico, ad ambari odorem aliquantisper accedente.” *Geoff.* ii. 202.—2. It is very resinous, or balsamic. “An ounce of it yielded to sp. vini ʒv. of a biting, bitter, aromatic, resinous extract of a fine purple colour; and the remaining more fixed or earthy part of the bark weighed only ʒij.” *Hist. Acad. R. anno 1719*, p. 68. So ʒj. was lost? —3. It is commended in too many diseases. “Mr. Fagon often used the chacril with success, in agues: less sufficed than of the kinkina, and its use needed not to be so long continued. Apinus, M. D. and P. at Altorf, seems to be the first who used it in tincture or infusion in epidemic and catarrhus fevers, and in substance in common fevers. Mr. Stahl, the King of Prussia’s physician, extended its use to pleurifies, peripneumonies, and convulsive coughs called quintes. Mr. Bolduc experienced its virtue in flatulent colics, and vapours. (N. B. If subtilising the humours only be required, the tincture suffices; if corroborating the parts be also indicated, the substance is preferable.) Chacril in substance also contributes to make the hæmorrhoids run. But its great success in the dysenteries in 1719, whether accompanied with a fever or not, is most remarkable. The ipecacuan here lost much of its honour, and the chacril gained it. For whereas the ipecacuan (as well as other vegetable emetics) weakened the stomach, and left a lasting feebleness behind it, the chacril recovered it soon to full vigour.” Thus *Hist. Acad. R.* l. c. Vide *Geoff.* ii. p. 202-208, where you will find, that according to Jo. Junckerus it does not answer in febribus malignis & contagiosis, though he commends it in omnibus inflammationibus excepta angina, in doloribus, hæmorrhagiis internis, vomitu cruento, lochiis nimis, hæmoptysi, as anodyne, &c. For my part I think it evidently hurtful in all hot inflammatory diseases, and all hæmorrhages. “Datur pulvis a gr. vj. ad ʒß. vel ʒj. Infusum ad ʒß. vel ʒj. Essentia seu tinctura cum sp. vini, a gut. x. ad xx. Extractum a gr. iij. ad vj. vel viij.” *Geoff.* ii. p. 208.

W I N T E R A N U S.

S E C T. I.

Cortex Winteranus, Cortex Magellanicus verus. Canella alba, *effc.* Cinnamonum, sive Canella tubis minoribus alba, *B. P.* 409. Canella alba quorundam, *Clus. Ex.* 78. *J. B.* i. 461. Arbor baccifera, laurifolia, aromatica, fructu viridi calyculato, racemoso, *Sloan. Cat. Jam.* p. 165. *Hist.* ii. p. 87. *Phil.*

Phil. Transf. N°. 192. p. 465. *Canella alba*, *Park.* 1581. *R. H.* 1802. *Cassia lignea*, *Jamaicensis*; cortice acri, candicanti, *Pluk. Phyt.* 81. The wild cinnamon-tree. White cinnamon, vulgo Winter's bark. *Winterania*, *H. Cliff.* p. 488.

It is a pretty thick bark, commonly in quills, of a yellowish white colour both without and within, the cuticle being grated off; of a hot biting aromatic, and bitterish taste, and fragrant spicy smell. It has more the flavour of cloves than of cinnamon. "Sapore acri, aromatico, odore fragranti." *Dale*. "It is of a hot aromatic biting taste a little bitterish." *Miller*, 106. "Sapore acri, pungente, aromatico, quasi mixto ex cinnamomi, zingiberis & caryophylli sapore; odore fragranti." *Geoff.* ii. 174. It grows in Jamaica, and other parts of the West Indies, and is a large tree.

William Winter, captain of one of the ships which accompanied Sir Francis Drake, anno 1578, to the Streights of Magellan, returning in 1579, brought the bark of some trees he had cut down there, to Europe. Hence Clusius called it *Cortex Winteranus*. It is the *laurifolia Magellanica*, cortice acri, *B. P.* 461. Vide *Dale*, 296. But it is now a stranger in Europe; and instead of it is kept the *canella alba* which was first brought home about the year 1600. "Ante paucos annos (before 1605.) cœpit exoticus cortex inferri, cui nomen canellæ albæ indiderunt." *Clus.* l. c. If it was not the same with what he had sent him from London in 1591, and came from Virginia.—Now although the *canella alba*, is very different from the *cortex Winteranus* as authors describe it; yet some are of opinion the difference is owing to the *locus natalis* only; vide *Cat. Jamaic.* and it is agreed that their virtues are much the same. Sir Hans Sloan says, the taste is much the same of both, and that either may be used as a succedaneum for the other; but that the true W. bark is much more aromatic. Vide *Phil. Transf.* N°. 204. p. 924. And hence their names became synonyma in foreign as well as British Dispensatories. But the error was too great to be overlooked by the London Committee, and *cort. Winteranus* is thrown out of the new *Materia Medica*. "Some of our apothecaries call the *canella alba*, *cortex Winterani*, and have used it for the costus in the mithridat." Vide *Park.* p. 1652, where he describes both these barks as they had them then.

S E C T. II.

It is an acrid stimulating diaphoretic, diuretic, cordial, stomachic, carminative and scorbutic; may be called nervine, and be used in all cold and plegmatic diseases. It is commended for weak and windy stomachs, the scurvy, dropsy, palsy, ague, &c.

"Calfacit, siccit, specificum est in scorbuto; vomitiones reprimat, paralyti quoque medetur." *Dale*, p. 296. & 300. "Maxime laudatur in scorbuto, febribus intermittentibus, & morbis chronicis, quibus præcipue prodest vi stomachica insigni." *N. Belg.* 90.—For 1. It is hot biting and bitterish like horseradish, (more than zedoary to which it is compared by some) but aromatic, and not so volatile; keeping well and long.—2. It contains an aromatic heavy oil; and seems to partake of the virtues of redcole, cloves, and lemon-peel. "It has a flavour not greatly unlike a lemon-peel: it is a warm
"aromatic

"aromatic drug, subtle and penetrating, and soon sensible to the nerves." Vide *Quincy* 77. "Saporis est acris, piperati, subamari, quasi ex caryophyllis, cochlearia & tantillo cinnamomi compositi; odoris fragrantis." *Lerm. M. S.* 3°. Winter's crew using it as a spice, found it beneficial in the scurvy. "Illius corticis facultates nullas exploratas habebat, sed eo recente melle condito, ut acrimoniam deponeret, vel resiccato & in pollinem trito, ut in edulis canellæ aliorumque aromatum vicem suppleret, utebantur, qui ea navi vehebantur. Postea tamen intelligebam, adversus stomacacis live scorbuti morbum, quo illorum nonnulli in ea navi affecti erant, non infeliciter usos fuisse." *Clus. Exot.* p. 75. And this Mr. Handisyd confirms. Vide *Phil. Transf.* No. 204. for October 1693, p. 923. "Canella alba utuntur indigenæ in obsoniis, & ciborum condimentis, piperis & caryophyllosum vice." Vide *Geoff.* ii. 176.

S E C T. III.

It may be given in substance to ʒß : In infusion to ʒj. An aromatic water and essential oil may be drawn from it. It enters the aqua raphani composita, and tinct. rhei dulcis.

"Distilled per vesicam it yields an aromatic oil, sinking to the bottom of water, like oil of cloves, with some small quantity of which being mixed, it has sometimes been sold for true oil of cloves." *Phil. Transf.* No. 192. p. 467, for Jan. and Febr. 1691. "Datur in substantia a ʒj. ad ʒß. vel ʒj. in infuso ad ʒij." *Albin. M. S.* "It is given in powder from ʒj. to ʒß. in infusion from ʒj. to ʒij. in aquæ cochleariæ ʒv. or vj." *Chomel.* 549. "Dosis a ʒß. ad ʒj. in substantia, ad ʒij. in infusione. Ejus usus biliosis & calidis naturis noxius est." *Geoff.* ii. p. 176.

Of the MEDICINAL WOODS.

AGALLOCHUM, and ASPALATHUS.

S E C T. I.

1. Agallochum, lignum aloes, & Xyloaloe *offic.* Agallochum officinarum, *B. P.* 393. *B. H.* 1808. Lignum aloes officinarum, & Agallochum plerisque putatum, *J. B.* i. 477. Agallochum, *Garc. Clus. Exot.* 172. A. five lignum aloes, *Park.* 1564. A. seu lignum aloes, calambac Indis dictum, *Bont. in Garz.* 5. Lignum aloes vulgare, *Ger.* 1622. "Sinkoo, vulgo Japonum Kavoriki, i. e. lignum seu arbor fragrans; Siamesibus Kissima; Latinis arbor aquilæ & aloes dicta; cujus fragrans lignum appellatur Agallochum." *Kämpf. Amoen. Exot.* 903." *Dale,* 347. Lign-aloes, or wood of aloes.

The lign-aloes of the shops is a hard, solid, heavy wood in small pieces, of a yellowish brown colour with interspersed dark purplish veins, of a warm, bitterish, aromatic, resinous taste, and when burning of a fragrant smell.

But that this is the best, or even the true lign-aloës, though brought from the East Indies, cannot be asserted; for it is valued there as much as gold itself; and it was reckoned among the most valuable of the magnificent presents, with which the King of Siam's ambassadors complimented Lewis XIV. of France in 1686. Vide *Savary Diët.* i. 73. "I have seen with Mr. Tradescant, the elder, before he died, a great piece of true lignum aloës, and of the best sort, as big and long as a man's leg, without any knot therein, which, as he said, our King Charles gave him, with his own hands; but was here kept before, and accounted by many, as a great religious relict, even to be a piece of the wood of that cross whereon our Saviour was crucified, and therefore was fetched away again from his son, to be kept as a monument or relict still. So fond are some of mere impostures, and to believe lies." *Park.* 1565. Among the rarities of the Royal Society there is, A piece of lignum aloës, with its own gum growing upon it, given by the Honourable Mr. Boyle. The taste of the gum is perfectly like to that of the wood. The colour like that of the purest and most lucid aloë called succotrina: for with the light reflected, it looks almost like pitch: with the light transmitted, it glitters like a carbuncle; powdered, it is of a reddish yellow. This or some other aromatic gum is the aloë of the Hebrews, whence the other from similitude hath its name." *Grew's Rar. R. S.* p. 179.

For the different sorts of this wood, various accounts of the tree it belongs to, &c. I refer you to *Dale*, *Geoffroy*, *Kämpfer*, and the authors quoted; and only observe that the true or best lignum aloës, called calamba, calambak, or tambac, is to be found in none of the shops in Europe: neither can I tell whether all that is sold for it comes from the same, or from different trees. "The aloës-tree grows in China, in the kingdom of Lao, and in Cochin-china. The trunk is of three colours, which make three sorts of wood, different both in nature and quality. Immediately under the bark, it is black, compact and heavy; and on account of its blackness, called by the Portuguese *Pao d'Aquila*: this is not to be found in France, except in the cabinets of some of the curious. Next under that, the wood is of a tawny colour, light, veinous, and resembles rotten wood. This is the calambouc wood, and the only true wood of aloës, which the druggists of Paris can furnish. In fine, the heart of the trunk is the precious tambac or calembac wood, dearer in the Indies than gold itself: and which made the rarest part, *an gré de Siamois*, and most esteemed of the presents they brought to Lewis le Grand, from their master, the King of Siam. This and the first are too rare for the druggist; and many of the woods to which they give the name of aloës-wood, are counterfeits, *bois supposés*, without virtue or value." Vide *Savary Diët.* i. 73. Can the sap of any tree, be more valuable than the wood within it? Who informed him so?

This wood is called ἀγαλλοχον, ab ἀγαλλομαι, *exulto, gaudeo*, according to some. "Agallochum lignum est quod ex India & Arabia deportatur, thyino ligno simile, punctis maculisve distinctum, odoratum, gustu quodammodo astringens, cum quadam amaritudine, cortice vestitum cutis instar molli, & aliquantulum versicolore." *Dioscor.* lib. i. c. xxi. p. 19. "Agallochum Dioscoridis, ξυλαλον Græcorum recentiorum. Hoad, agalugi &

“ & agallugum Arabum : agallochum, Xylo-aloes, & lignum aloes, *offic.*
 “ Lignum aquile, lignum paradisi, & lignum sanctæ crucis Quorundam.
 “ Lignum est resinofum, odoratum, prorsus diverfum ab aloë, succo amaro
 “ cathartico, in officinis ufitatiffimo. Neque etiam est lignum arboris ex qua
 “ ille succus stillat, ut quidam exiftimaverunt.” *Geoff.* ii. 214. Few think fo
 now ; but many that it is uncertain whether the agallochum and hyloaloe be
 the fame ; and whether what we have in the ftops deserves the name of
 either.

Aspalathus *offic.* “ Aspalathum *offic.* *Mont. Exot.* 7. Agallochum præ-
 “ ftantiffimum. *Jenf. Dendr.* 460. *B. P.* 393. Calambac wood. Frufta funt
 “ lignofa & bituminofa, ligno aloës laxiora & craffiora, colore pallidiora, fa-
 “ poris amaricantis, pinguis & resinofi, odoris debilioris. Ex India orientali
 “ ad nos transportatur.—Similes habet virtutes cum agallocho (pro quo
 “ frequenter venditur) fed debiliores.” *Dale*, 347. Aspalathum lignum. Bel-
 gice Liger Paradiſshaut. *Pharm. Leiden*, (edit. 1718.) p. 9. Ἀσπάλαθος,
 Dioscoridis : Ἐρυσίχηπτρον Quorundam : Aspalathus Plinii : Darſiſahan Ara-
 bum, *Geoff.* ii. 218. who adds, “ Res est prorsus ignota in officinis nostris ;
 “ & ſi quæ ſub aspalathi nomine occurrunt lignea fruſta, inter ſe prorsus di-
 “ verſa ſunt, & incertæ originis. Neque mirum, cum etiam veteres de hoc
 “ ligno inter ſe diſſentire videantur, &c.” Vide a pag. 218. ad p. 222. In the
 old *London Diſpenſatory* the aspalathus is the ſame with lignum Rhodium : The
 new one has thrown out both agallochum and aspalathum, retaining however
 lignum Rhodium.

The aspalathus of the Dutch ſhops is a ſolid, hard, heavy wood, in frag-
 ments partly blackiſh, and partly yellowiſh and ſometimes veined, of a bit-
 teriſh resinous taſte and little ſmell. “ Lignum aspalathum præcipue diſtin-
 “ guitur a ligno aloës odore & ſapore debiliore, colore fuſco-rubicundo ver-
 “ gente ad flavedinem, huic inde partibus albicantibus junctis, vires habet
 “ L. aloës, ſed debiliores.” *Nucl. Belg.* p. 172.

“ Authors are not agreed about the true aspalathus. In effect three ſorts
 “ of wood are ſo called. 1. A blackiſh wood, which many think, and not
 “ without probability, is the lignum aquilæ, whereof the ſmell is ſtrong.
 “ 2. The wood of a little prickly tree, heavy, ſolid, oily, of a purpliſh ſpeckled
 “ colour, acrid bitter taſte, and pretty odoriferous. It comes near to the
 “ lign-aloes in weight, taſte, ſmell and virtues ; and they are often in com-
 “ poſitions ſubſtituted the one for the other. 3. The lignum Rhodium,
 “ which ſome alſo confound with the lignum Cypreum. Some add a 4th
 “ ſpecies, which has an aſh-coloured bark and red wood, and ſmell like and
 “ as ſtrong as caſtor.” *Savary, Diſt.* i. 164.

S E C T. II.

They are probably all ſtimulating, diaphoretic, and diuretic ; are called ce-
 phalic, cordial, ſtomachic, and uterine, and commended in many diſeaſes.
 I can affirm nothing concerning any of them. The lign-aloes was an ingre-
 dient in the pulvis diambriæ ; but this compoſition is omitted in *Pharm. Edinb.*
 edit. 1744. The aspalathus is ordered in the trochiſci cypheos pro mithridatio,

& migma hedychroi: but for it we direct *santalum citrinum*, so that neither are ever used here.

“ *Agallochum*, 1. calfacit & siccatur. 2. Confortativum est omnium viscerum, ac præcipue cerebri, cordis ac uteri; spiritus vitales ac animales re-creat; hinc medetur lypothymia; amaritudine sua lumbricos necat. Externe creber ejus usus est in cucuphis, & epithematibus cordialibus. Præparatur, 1. Extractum cum sp. vini, cujus dosis a gr. iv. ad x. 2. Species diaxylaloes. 3. Trochisci diaxylaloes.” *Schroder. 527.* whose aspalathus is *lignum Rhodium*. *Lignum aloes* est egregium analepticum & stomachicum, excitat menses & sudores, valet ad dysenteriam & alios fluxus alvi, ad lypothymiam & cachexiam.” *Nucl. Bel. 171.* where the aspalathus is made only weaker. “ *Lignum aloes* revera oleo essentiali uberrimo pollet, quod distillationis ope extrahi potest: in lypothymia, syncope & paralyti convenit. A quibusdam ad memoriam firmandam laudatur: apud Anglos ad podagram & rheumatismum sanandum plurimum commendatur. Ejus substantia a ʒss. ad ʒss. exhibetur. Decoctum propter amarorem raro præscribitur. Tinctura ope sp. v. a ʒss. ad ʒij. Oleum essentielle a gutt. iii. iv. ve, ad xx. exhiberi potest.” *Geoff. 218.* He observes, that according to *Bontius* ejus ʒj. cures the cholera and kills worms; and that it is the best succedaneum for the aspalathus. *V. p. 220.*

The *santalum citrinum*, which was also the succedaneum *Pb. Lond.* for the aspalathus, is as liable to exception as this is. Were it of any consequence, the cortex eleutheria would do better: but there not being in *mithridatii* ʒij. aspalathi $\frac{1}{15}$ grain, and in as much theriacæ not $\frac{1}{2}$ gr. it might well be left out altogether, as is now done at London. *Vid. Cod. Medicament.*

ASPALATHUS ROSEUS.

SECTION I.

Aspalathus odore roseo, *lignum rhodium*, offic. *aspalathus albicans*, torulo citreo. *B. P. 392. Ger. 1624.* *Lignum rosæ* odoris, aliis *lignum thuris*, aliis *aspalathus*. *J. B. i. 472. R. H. 1809.* *Aspalathus*, *Lob. Adv. 427.* *Rhodium lignum*, *aspalathus. Schrod. 661.* Rose-wood, or rhodium, is a solid, hard, heavy, yellow wood, with a white sap, of a soft resinous taste, and pleasant smell, like a rose.

Mr. Dale describes two sorts of it, as kept in the shops, viz. that above, and the *aspalathus colore buxi. B. P. 392. R. H. 1809.* though Mr. Ray makes it the same with the other, and Miller mentions only one; perhaps different parts only of the wood of the same tree, whether of the trunk or root. “ Ex insulis Canariensibus & aliunde affertur.” *Dale 346.* “ This wood, or root rather, comes from the Canaries.” *Miller. Bot. 58.* “ It is got from a very tall and strait tree, which grows in several places of the Levant, in Martinico, Cyprus, Rhodes; hence called *lignum Rhodium*, & *lignum Cyprinum.*” *Lemery Dict. 310.* “ It is very common in the Antilles, grows very high and strait. The wood takes an admirable polish, is of a fillemot colour, and very sweet-smelled. The Dutch draw a very
“ odo-

“odoriferous oil from it, which druggists sell by the name *Oleum Rhodium*.” *Savary Dict.* ii. 1432. In a word, authors are not agreed about this wood: the name coming from the smell, and that being perhaps the chief characteristic, there may be several woods so called. “*Rhodii ligni, sive aspalathi Rhodii quibuldam putati historia, nobis non minus obscura & intricata videtur quam aspalathi veterum.*” *J. B. Vid. Dale & Geoff.* ii. 220—222.

S E C T. II.

It is probably diuretic and antiseptic, but used only as a perfume, or for its scent; the raspings in sweet-bags, the oleum in pomatums, soap-balls, &c. The oleum Rhodii was in the balsamum ad apoplecticos, but is omitted in the last edition (1744) of our *Dispensatory*.

“Dioscoridi & Galeno calfacit & siccatur, & astringit, unde commendabile ad ulcera oris, ad nomas genitalium & sordida ulcera, ad alvi fluxus. Verum enimvero an hæc nostrati convenient, cuivis licet experiri. Vix enim modernis practicis in usu est: nisi quod interdum ad renum calculos decoctis incoquatur. *Præp. Oleum stillatitium, quod communiter pro oleo rosarum habent.*” *Schroder.* 661. “Ligno, sicut ejus oleo essentiali, cor & cerebrum roborandi vis tribuitur.” *Geoff.* ii. 222.

The common rose-wood is not acrid, but contains a soft aromatic balsam, which is drawn from it by distillation in the form of a transparent liquid oil. Le Mort, or rather Muykens, in the *Col. Chym. Leid.* p. 363. gives the process accurately. “*R Ligni Rhodii rasi q. v. maceretur in f. q. aquæ falsæ per duos aut tres menses; dein f. per vesicam distillatio, addito tartari crudi m. i. vel ii. Dein oleum ab aqua f. a. separa. Externe odoriferis inservit, interne diuresin movet. Dosis interne ad gut. x.*”—Thus *Col. Chym.* l. c. Is so long maceration necessary?

C O L U B R I N U M.

S E C T. I.

Lignum colubrinum offic. *Lignum colubrinum, Garzizæ, Clus. exot.* 214. *Aeschæ, ib.* 276. *R. H.* 1806. & 3. *Dendrol.* p. 88. *J. B.* ii. 169. *Bent. in Garc.* fol. 9. b. “*Nux vomica minor, Moluccana, lignum colubrinum officinarum.*” *Par. Bat. prod.* 357. *Solanum arborescens, Indicum; foliis napeæ majoribus, magis mucronatis; fructu rotundo, duro, spadiceo-nigriscente; semine orbiculari compresso maximis.* *Breyn. prod.* ii. 93. *Commel. Flera Mal.* 249. *Nux vomica altera. R. Dendr.* 117. *Fructus orbicularis peregrinus; cum granis nuci vomicæ similibus.* *J. B.* i. 341. *Modirac Caniram. H. Mal.* viii. 47. t. 24.” *Dale* 327. Snake-wood is a solid, heavy wood, of a whitish (or oak-wood) colour, acrid and very bitter taste, without smell; it is covered with a brown bark, with many ash-coloured spots on it, and comes from the East Indies in pieces, sometimes as thick as one’s arm.

There are several species of it in authors ; Garcias has three ; Acoſta three. *B. P.* 7. p. 301. They are ſaid to grow in Ceylon by Garcias ; in Malabar by Acoſta ; in Timor by Herman. *M. S.* and to be deſcribed only in the *H. Mal.* by *Albin. M. S.*—The ſeed of ſome of the ſpecies is called *Nux vomica offic.* *Nux vomica* in officiis. *B. P.* 511. *Nuces vomicæ. Ger.* 1546. *Nux vomica. Park.* 1601. *R. H.* 1814. *N. vomica vulgo officinarum, compreſſa, hirsuta. J. B. i.* 339. “ *Nux vomica, major, & officinarum. Par. Bat. prod.* 357. *Malus Malabarica, fructu corticoſo, amaricante, ſemine plano, compreſſo. D. Syen. R. H.* 1661. *Solanum arboreum Indicum, maximum, foliis cœnopliæ ſive napecæ majoribus, fructu rotundo, duro, rubro, ſemine orbiculari compreſſio maximis ; nuces vomicas, & lignum colubrinum officinarum ferens. Breyn. prod. ii.* 92. *Comel. Fl. Mal.* 249. *Malus Indica venenata amara, nucleis argenteis compreſſis, orbiculatis, Ghodhakadura ; nux vomica officinarum. Herm. Muſ. Zeylan.* 41.” *Dale* 327. — *Vomic nuts* are flat, round ſeeds, about $\frac{1}{4}$ of an inch broad, $\frac{1}{4}$ thick, of a greyiſh colour, downy a little on the outſide, hard and horny within, of a very diſagreeable bitter taſte and no ſmell. *Vid. Miller Bot.* 316. “ *Cum in duos orbiculos funduntur, uterque in orbis circumferentia, exiguum foramen habet, quo continetur ut annotat Cordus, germinaturæ plantæ rudimentum, exiguo pediculo, duplicique folio conſtans.*” *J. B.*—So this is neither a root nor a muſhroom, as ſome have imagined. Akin to theſe is

Faba Sancti Ignatii offic. *Dale* 328. *Faba febrifuga, & faba Sancti Ignatii offic. Geoff. ii.* 458. *Nux pepita, ſeu faba Sancti Ignatii. Pb. Transf. No.* 249. p. 44. *Igaſur, ſeu nux vomica legitima ſerapionis camelli. Pb. Transf. No.* 250. *Vid. Abridg. vol. ii. p.* 648—652. “ *Igaſur, ſeu nux vomica, legitima ſerapionis camelli ; faba Sancti Ignatii vulgo. R. Dendr.* 118. *Cucurbitifera malabathri foliis ſcandens, Catalongay & Contara Philippinis orientalibus dicta, cujus nucleis pepitas de Byfayas, aut Catbalogan, & faba Sancti Ignatii ab Hiſpanis ; Igaſur & Mananaog, i. e. victorioſi, inſulaniſ nuncupati. Pluck. Mont.* 60.” *Dale* 328. *Saint Ignatius’s bean* is a ſeed about the bigneſs of a nutmeg, roundiſh, ſomewhat triangular and heart-like, downy on the outſide like the *nux vomica*, and of the ſame conſiſtence, but blacker within, and of a bitter taſte and no ſmell, brought from the Philippine iſlands.

“ *Faba Sancti Ignatii eſt fructus magnitudinis circiter nucis moſchatae, ſiguræ cordis gallinae, externe teſtus pellicula tenui, coloris gryſei, ſub qua continetur ſubſtantia ſpadicei coloris, quæ difficile frangitur, ſed facile ratur ditur ut cornu, & tunc ſpirat odorem gratum ; ſaporis eſt amari.*” *Nucl. Belg.* 111.

It came into the Dutch ſhops but about the latter end of the laſt century. *Lemery* ſays it was a Spaniſh Jeſuit who firſt diſcovered it to the Portugueſe merchants, and called it *faba Sancti Ignatii*, (from *Ignatius Loyola*, who founded their order in 1535.) *Diſt.* 215. “ *Paucis ab hinc annis, illos adhuc incognitos nucleos, Luſitani patres S. I. miſſionarii ex Philippinenſibus inſulis attulerunt. Geoff. ii.* 458. *Michael Bernardus valentinus, Archiater Haſſiacus, & medicinæ profeſſor, qui primus de hoc nucleo diſſeruit, tractatu de polychreſtis exoticis, & nuperrime in hiſtoria ſimplicium reſormata, teſtatur, &c.*” *Geoff. ii.* 461. “ *Valentini Polychreſta exotica in curandis affectibus*

“ affectibus contumacissimis probatissima, faba scil. S. Ignatii, ipecacuanha, china chinae, clyster tabaccus, &c. was printed Francofurti ad Mœnum, “ 1700. in 4to.” *Segmer. B. B.* p. 307. According to *Segmerius*, p. 184. whether the nut or seed treated of by Sir Hans Sloane in the *Phil. Transf.* No. 150 and 349, and by P. Hotton, No. 257, be the nux vomica, or nux metel serapiomis, let others determine; I cannot. Vid. *J. B.*

S E C T. II.

The lignum colubrinum appears to be a virulent and dangerous cathartic; though called alexipharmac, and commended for agues, bites of venomous creatures, worms, &c.

Vomic nuts and Ignatius's bean, I think, are of the same nature, and can recommend the use of neither of them. They have no place among our simples, and I mention them only to caution you against the rash use of them.

“ Lignum colubrinum calidum est & siccum (ut amaror arguit) abstergit, “ moribus serpentum, aliisque venenis medetur: bilem ac mucilaginem per “ alvum (nonnunquam per vomitum) educit: unde usus præcipuus est in “ febribus intermittentibus, tertiana ac quartana; lumbricos necat ac fugat. “ Extrinsecus maculas cutis abstergit. Præp. Extractum cum aqua.” *Scbrod.* p. 569. “ Est stomachicum, anthelminticum, & febrifugum; aliquandò “ vomitus, secessus, & diuresim movet. Datur ad ʒß in infuso.” *Nucl. Belg.* 172.

“ Nux vomica narcotica est, virulenta, & opio deterior. Canes, feles, “ corvos, &c. cum cibo exhibita interimit, vomitumque ciet. *Dale* 327. “ Ingreditur quasdam compositiones alexipharmacas. Quadrupedibus est ve- “ nenum, & hominibus suspecta.” *Nucl. Belg.* 210. I know of no physical “ use these nuts are applied to, they being narcotic and poisonous, and only “ used to destroy cats, dogs, &c.” *Miller B.* 316.

“ Faba S. Ignatii veneno resistit, febres quartanas curat, urinam & menses “ provocat; vertiginem inducit, & vomitiones ciet.” *Dale* 328. “ Vim ha- “ bet roborantem & stomachicam; conducit optime ad febres præcipue in- “ termittentes, in quibus datur media hora circiter ante paroxysmum ad ʒß; “ laudatur etiam ad pleuritidem spuriam, vertiginem, epilepsiam, passionem “ iliacam & diarrhœam.” *Nucl. Belg.* 112. “ Novissime increbuit usus fabæ “ quam vocant di Sanct. Ignatio; dicitur & Igasur, & Faba di S. Nicholas “ & de cava longa. Semen est amarissimum. Ad movendos sudores, & de- “ bellandas febres præcipuum creditur, & diarrhœæ, dysenterix, colicis dolo- “ ribus, morbis convulsivis, ipsique epilepsix mederi, & externe admotum “ scabiei; celebratur cum primis & ejus virtus alexipharmaca.” *Hotton.* l. c.

But, 1. Snake-wood is not only excessively bitter, purgative and emetic, but occasions such symptoms, as sufficiently evince its malignity. “ Hujus “ ligni usus non est nisi annosioris, recens enim primo anno maniam, tormina, “ hinc vomitum, & tandem convulsiones excitat.” *Herman. Cynesf.* p. 235. “ Ex observationibus *Antoni de Heide*, obs. 53. p. 121. vi virulenta, soporosa “ ac maligna, hoc lignum præditum est; hinc non tutum esse affirmo interne “ exhiberi. Ad febrem quotidianam sedandam (inquit) ligni colubrini pul-

“ verem assumpsit tornator quidam circa vesperam, subsequente nocte satis
 “ bene habuit, sed mane surgere vel corpus movere satagens, sentiebat tre-
 “ morem in membris : accersitus exhibui mixturam hypnoticam, & intra pau-
 “ cas horas tremore liberatur æger. Ejusdem ligni ʒß. assumpta a muliere
 “ cachectica, præter tremorem excitavit & stuporem, ita ut ægra nullius rei
 “ curam haberet, nesciens (ut mihi retulit) se esse in mundo, vel vivere. Cu-
 “ ratur mixtura hypnotica. Retulit mihi illustris domina famulum suum, ab
 “ assumpto hoc ligno, per aliquot dies instar fatui extitisse hæc pensiculans et
 “ conferens cum symptomatis a nuce vomica in cane excitatis, obs. 50. exa-
 “ ratis, libenter subscribo asserenti, nucem vomicam esse fructum ligni colu-
 “ brini.” *Dale* 328. (whom Geoffroy transcribes,) who omits, after *membris*,
 and after *vivere*, the cure; as well as after *extitisse*, the author’s inference. Vid.
R. H. p. 1808. 2. It is not certain, that all the wood sold under this name
 is from the same tree, or of the same nature. The snake-wood indeed is
 much commended by Garcias, Acoſta, Bontius, &c. But some things related
 concerning it smell strong of fables : e. g. the combat between the little ferret-
 like animal called quill, or quirpele, and the serpent cobras de capelo, in Cey-
 lon, recorded by Garcias, believed by Bontius, but reckoned, and justly, a
 fable by Mr. Ray : yet this is said to have discovered its virtues against the
 bites of serpents, or its being an antidote. “ And therefore (it is) better let
 “ alone and neglected, as it is in our shops.” *Miller, Bot.* 146.

The nux vomica is commonly known to be a strong and sudden poison to
 several animals, and that in a very small quantity. Gesner gave to a dog nucis
 vomicæ ʒß. with flesh : in a quarter of an hour it fell a-sleep, suffering various
 convulsive motions, and in four hours died. Another dog, to which he gave the
 same quantity, after suffering very dreadful symptoms for about three hours,
 recovered by taking antidoti saxonice Morbani ʒß. and that without vomiting.
 Vid. *J. B.* who made the same experiments. See also those made by *Ant. de Heide*
Centur. obs. 50. p. 116. or *R. H.* p. 1804. But, above all, *Wepfer de Cicuta*
Aquatica, p. 194—219. deserves to be perused, on account of his accuracy in
 relating all the phænomena, and the useful consequences he thence deduces
 in the annexed scholia, p. 210, &c. From which it appears, that the nux
 vomica caused all the symptoms, particularly convulsions, epileptic fits, and
 death itself, by its action on the stomach immediately : for it commonly
 killed before any of it was expelled the stomach ; occasioned convulsions in a
 shorter time than appeared to be necessary to take a tincture from it and
 convey it into the blood ; the blood was nowhere coagulated ; and neither
 the spirits nor the nerves seemed affected. And yet the stomach itself was
 not corroded ; nay, even sometimes, as appeared in some animals killed by it,
 the stomach was not so much as inflamed in any part of it ; and where it was
 inflamed, it was not in the part where the nux vomica lay, which, as De
 Heyde observes, was only a little softened, and no more altered, than if the
 parts of it had only been infused as long in warm water. Hence, as I long
 ago noticed, the effect of poisons does not always flow from their action on
 the blood, or on the spirits ; neither on their corrosive acrimony ; the nux
 vomica, &c. acting none of these ways. However much therefore this nut
 or seed may be commended by some ; though even Ludovicus prefers gentian
 mixed

mixed with tantillo nucis vomicæ to the cortex in agues, (Vid. *Pharm. ejus.* p. 113.) P. Albinus (in M. S.) says, "In maniacis, nucem vomicam a gr. ii. ad viii. sæpius dedi, ad quietem conciliandam, quod non semel successit, cum nullis opiatis aliquid efficere potuissẽm;" and though it was an ingredient in the famous electuarius de ovo, (Vid. *Pb. Aug.* p. 263.) yet still its virulency is too evident to be doubted. Vid. *Arsenicum*.

"Cum post terrorem pridie conceptum 1635, in autumnno peste corripere, statim potio bezoartica a D. Jo. Burgowero præscripta fuit, exhaustam protinus evomui, subsequente magna anxietate, & summa virium prostratione ut de me actum crederetur. D. parens meus de vita mea sollicitus, medico periculose ægrotante, portiunculam el. de ovo in aceto rutaceo solutam, propinavit: mox obdormivi, tota nocte sudavi. Mane surrexi vegetus, emergente sub axilla dextra bubone parvo, qui citra suppurationem, aut ulteriorem decubitus, aut usus medicamentorum evanuit, pleneque per Dei gratiam convaleui." *Wepfer. Cicul.* p. 211. "Si enim semel bene successit, non ob id tutum est experimentum. Neque desunt contraria. Quæ causa mihi fuit hætenus, cur electuario de ovo Maximiliani I. Imper. obtruso ab impudente quodam empirico, nunquam uti voluerim. Ut in politicis, qui semel malus semper præsumitur talis, ita in medicina, non utar incertis, cum certa præ manu habeo." *Hoffman.* p. 402. — "Succus ex foliis caniram expressus, ac in decocto datus, capitis dolores sedat; largius epotus veneni vires habet, mortem inducens; in stercore hominum comesto salus est *E. H. Mal.*" *R. H.* 1661.

As for the faba S. Ignatii, it has much the same taste and consistence with the vomic nut, and its effects are the same. For Father Camelli tells us of one to whom he gave only fabæ ʒj. who "statim ac sumpsisset, tremore totius corporis, trium horarum spatio persistente, una cum pruritu, & vellicationibus convulsivis horrendis, ut pedibus insillere nequiverit, quæ in maxillis vehementiores erant, ac magis molestæ, ita ut quodam modo ridere cogeretur, correptus fuit; nullo insequente vomitu." Of another, who suffered the like, and "una cum (says he) summa præcordium angustia, vertigine, animi deliquio & sudoribus frigidissimis. Hic nucem recentem integram devoraverat. Cui oxymel & oleum, cum tepida exhibendo, quo plurimum viscosi phlegmatis, cum nucis particulis rejecit, openi tuli."— See more instances of such-like symptoms following the use of it. *Phil. Transf.* l. c. & *Geoff.* ii. 459.

S E C T. III.

The dose of the snake-wood is said to be to ʒß. in infusion, by Herman and Geoffroy; though perhaps ʒß. would be too much of the powder. The vomic nuts have been given to gr. viii. and S. Ignatius's bean to ʒj. but ʒß. is too much. I would not adventure on gr. v. of any of them.

"The chief use the nux vomica is put to is to kill dogs and cats, crows, ravens, and other creatures; or upon pleasure to strew thereof upon flesh a little sprinkled over with aqua vitæ, tied fast to some stake or other such-like thing, which will make them, after they have eaten thereof, seem as it were drunk.—Some give inwardly 3 or 4 gr. of it." Vid. *Paræ.* 1602.

L E C T U R E L.

G U A I A C U M.

S E C T. I.

GUAIACUM, lignum sanctum, lignum vitæ, *offic.* Guaiacum, magna matrice. *B. P.* 448. Guaiacum. *Ger.* 1611. *R. H.* 1685. Guaiacan, lignum Indicum dictum. *Monard. Clus. Exot.* 312. Guaiacum, five lignum sanctum, lignum vitæ. *Park.* 1586. *G. Jamaicense*, lentisci subrotundis foliis, læte virentibus, flore albo. *Pluk. Phyt.* t. 35. Pruno vel euonymo affinis arbor, folio alato, buxæo, subrotundo; flore pentapetalo, cœruleo, racemoso; fructu aceris cordato, cujus cortex luteus, corrigatus, semen unicum majusculum nigricans, nullo officulo tectum, operit. *Sloan. Cat. Jam.* 186. *Hist.* ii. 133. Guaiacum, pockwood, or lignum vitæ, is a hard, solid, heavy wood, of a dark brown colour, with a yellowish sap, of a subacid, bitterish, and somewhat aromatic taste, and pretty fragrant and agreeable smell, when rasped or heated; covered with a pretty firm ash-coloured bark, spotted and composed of several laminæ, of a subacid bitter taste, and little smell if not musty.

It grows in Jamaica, Hispaniola, and other parts of the West Indies. The red wood keeps well; but the more recent, and the more resinous it is, it is reckoned the better. Some distinguish between the guaiacum and the lignum sanctum, or guaiacum propemodum sine matrice. *B. P.* But probably they are only varieties; or the difference is owing to age or place. Sloane makes them one and the same. Monardes says, a Spaniard of Saint Domingo was the first of the Europeans who experienced its effects in the lues venerea, (being taught it by an Indian servant); and who made it known to his countrymen, who soon brought it to Europe.

The learned Freind, (*Hist.* ii. 365.) writes thus concerning it. “A little before this, the great specific guaiacum had been introduced into Europe, and was soon in that high repute, as to be put in competition at least with mercury, nay, and for some time to carry the vogue far beyond it. Gon-salvo Ferrand first imported it. He had been infected himself at the siege of Naples; and meeting with no cure in Italy, went to the West Indies, with a design to find out how the inhabitants there treated themselves in a case which he knew was so familiar among them, and as common as the small-pox was in the European nations. A circumstance very remarkable, that the same country should furnish both the disease and the antidote, and the one within a few years of the other. And this is a proof at the same time, that it was a distemper entirely new, and imported from the new-found world, in the manner I have already related; else what could have carried this man back to the West Indies for a cure? When he had informed himself of the remedy, (which there universally succeeded, and the more so perhaps because the climate was hot, and the way of living very temperate), he returned to Spain, and set up for a practiser himself

“ in this new distemper, and gained as great riches by his method, as the
 “ mercurial doctors by theirs. I suppose he might make a monopoly of it;
 “ for it appears, that some time after it was sold for seven gold crowns a
 “ pound.” Gonsalvi Ferrand Owietenfis de guajaco ligno tractatus unus, &
 de ligno sancto, tractatus alter, are among the authores varii de morbo Gallico,
 p. 355.

S E C T. II.

It is an attenuating antiseptic, diaphoretic and diuretic, of a bitterish aromatic taste, and its resin is purgative. It is called a specific for the lues Gallica, and commended also in the scurvy, gout, rheumatism, and almost all chronical distempers. The bark is of the same nature as the wood, but weaker, and less resinous. — “ Lignum calfacit & siccit, sudorem ac urinam
 “ largiter promover, ad oque sanguinem mundificat, putredini resistit. Usus
 “ præcip. in arthritide, hydrope, catarrhis, aliisque morbis a phlegmate tartareave mucilagine, aut flatibus oriundis: peculiariter ac specificè curat
 “ luem Gallicam. Cortex minus calidus est quam lignum. Gummi (resina)
 “ mihi communicavit A. Sonnemann, idque cum felici successu aliquoties in
 “ curando L. G. fuisse adhibitum affirmavit. Sapore est acri, colore ac figura
 “ laccam fere representante, pellucidum, friabile. Præparationes sunt, 1. Decoctum. 2. Extractum gummosum. 3. Oleum rectificatum quod sit destillatione. Dosis gr. iij. v. in L. G. 4. Spiritus, qui acidulus est. 5. Sal, ex cinere.” *Schroder*, 599.

1. It is pretty acrid, aromatic, and bitterish, as appears more in the taste of a strong decoction, than of the wood itself. It is also resinous, yet so as to yield its resin by long boiling to water. “ Lignum saporis acris, amaricantis, odoris aromatici.” *Dale*, 331. “ Saporis acris & piperati.” *Nucl. Belg.* 172. “ Sapore subamaro, nonnihil aromatico, miti acrimonia palatum ac fauces compungente; odore, dum incalescit aut uritur, fragrante non ingrato. “ Cortex sapore acri, amaro ingrato.” *Geoff.* ii. 224. 2. Chymically analysed, guajaci lbiv. (64 ounces) yield phlegmatis & spiritibus acidi lbij. 3vij. olei 3vss. carbonis lbj. 3ij. & inde salis fixi ziv. vel vj. so 3ß. only is lost: according to *Lemery* (*Chym.* p. 579.) who says the spirit turns ink with vitriol. “ Aqua (viz. that which rises first) erit acidula, limpida, penetrans, odorem saporemve guajaci vix exhibens, nidorem sub-ambusti dans, atque harengi summati parum æmulans: aqua secunda erit rubella, acidior, nidorosa magis, haleces fumatos fortius exprimens, aliquidem empyreumatici exhalans, acrior longe.” *B. Chem.* ii. 135. See process xxxii. p. 133—139. 3. Its principles are very fixed; nothing flying-off in decocting but insipid water, scarcely if at all acid, which *Lemery* rejects as useless. Hence the decoction, wherein both salts and sulphurs are dissolved, is a penetrating attenuating, antiseptic, diaphoretic and diuretic liquid. By the liberal, and long continued use of which, sweating, and a proper light and spare diet, an entire change of the constitution may be effectuated; and several chronic diseases cured. Hence, 4. It is so much commended, and in the Indies especially so successful in the French pox, as well as in many other diseases; though perhaps extolled somewhat out of measure. “ In morbo Gallico curando nullum est medica-

“mentum eo præstantius & certius,” says *Monardes*; who after an account of the introduction of the disease into Europe, and how the wood is to be used, adds, “Hæc est optima sumendæ aquæ guayaci ratio, qua multi desperati morbi curantur: atque illa aqua non est præstantius ullum remedium ad curandam luem veneream, cujusunque tandem sit generis: radicitus enim eam extirpat. Convenit item hydropicis, asthmaticis, epilepticis, morbis vesicæ & renum, doloribus juncturarum, omnibus morbis ab humoribus frigidis & flatibus procedentibus, & diuturnis quibus inutilia fuerunt ordinaria medicamenta; præsertim si morbum Gallicum subsequantur.—Dentes etiam confirmat & dealbat hæc aqua, si sæpius ea colluantur.” 5. The resina guajaci purges pretty briskly: though authors generally overlook this quality, *Miller* does not. “The gum or rosin is somewhat cathartic, and a good purge in rheumatic cases, to the quantity of ℥ij. mixed with the yolk of an egg, and given in a convenient vehicle. It is likewise good for the scurvy, and serviceable against scabby breakings out, and other deformities of the skin.” *Miller, Bot. 221.* Guaiaci optimi ℔j. dat resinæ solidæ ʒx. ℥ij. circiter.

“Guaiacum lignum, cortex, gummi—operantur per sudores & diuresim; specificè valent ad luem veneream, & omne ejus satellitium, ad scorbutum, paralysem, rheumatismum, arthritidem, hydropem, fluorem album, asthma, cachexiam, ulcera maligna, scabiem, & morbos cutis pruriginosos, & cæteros morbos chronicos, in quibus adest lentescencia humorum. Ingreditur ordinariè decocta sudorifera ad aliquot uncias. Fit oleum empyreumaticum, resina, tinctura, præcipue ex ejus cortice: ejus gummi specificè valet ad gonorrhœas malignas; datur ad ʒß.” *Nucl. Belg. 173.*

“Analyfi chymica ex guaiaci ligni nigricantis & resinosi in scobem redacti ℔v. extractæ sunt phlegmatis tum acidi tum alcali ℔j. ʒxij. ziiij. quarum prima portio ʒv. (fere) ligni odore & sapore, mere salis alcali, urinosi notas præbuit, siquidem sublimati corrosivi solutionem turbidam & lacteam effecerit.—Ultimæ ʒxviij. magis ac magis acidæ gustu prodierunt, ac tandem heliotropii tincturam igneo colore infecerunt. Nihilominus tamen sallem alcalinum semper manifestarunt, scil. sublimatum corrosivum solutionem præcipitando. Cum his liquoribus prodierunt olei nigricantis, adinstar syrupi crassi, aqua gravioris ʒix. ʒviß. Olei tenuioris flavescentis & aquæ supernatantis ʒiv. Carbonis pondus fuit ℔ij. ʒj. ʒvij. Jactura fuit ʒvij. ʒviß.—Cinis albicans ex carbone diu calcinato pendebat ʒij. ʒvj. gr. xii. ex quibus cineribus salis fixi non mere alcalini, sed salis ʒj. gr. lxii, lixiviationis ope, extracta fuerunt.” *Geoff. ii. 228, &c.* where are also the analyses alburni, & etiam corticis guaiaci, which differ much from one another; as they all widely do from that given us by *Lemery*, as appears from the following table.

Analyfi Chymicâ Guaiaci ℔v. dedere.

		Phlegmat.			Olei.			Carbon.			Ciner.			Sal fixi.				
		ʒ.	ʒ.	gr.	ʒ.	ʒ.	gr.	ʒ.	ʒ.	gr.	ʒ.	ʒ.	gr.	ʒ.	ʒ.	gr.		
Ligni.	Lem.	48	:	6	:	00		23	:	6	:	00		00	:	5	:	00. al.
Ligni.	Geoff.	28	:	3	:	00		33	:	7	:	00		02	:	6	:	12. fa.
Alburni.	Geoff.	31	:	2	:	18		23	:	3	:	36		01	:	4	:	66. fa.
Corticis.	Geoff.	24	:	1	:	32		29	:	4	:	54		13	:	6	:	60. al.

“ Spiritus

“ Spiritus guaiaci becomes black like ink, when a little vitriol is dissolved in it. It does not ferment with sp. vitrioli, or other acids, neither sensibly with alealine liquors; but ferments a little with dry alkaline salts and crab-eyes: it does not render the solution of sublimate corrosive turbid; but reddens the tincture of turnsole: all which shew that acidity predominates in this spirit.” *Lemery, Chym.* 579.

“ Mirum sane hac in analysi mediam tantum partem principiorum guaiaci extrahi. Necnon observatu dignum est hujus carbonem, etiam post duos tresve dies aeri expositum, statim exardescere, nullo admoto igne; modo perfecta distillatione, retortæ collum accurate obturetur, & vasa furnusque per se refrigerant.—Ex hac analysi sequitur hoc lignum constare ex sale acido vitriolico, oleo & terra strictissime unitis.” *Geoff.* ii. 229. I don’t see the consequence. “ Cortex vero guaiaci a ligno, tum principiis tum principiorum mixtione, multum discrepare ex analysi chymica demonstratur.—Unde recte concludi potest, utriusque vires diversas esse, nec indiscriminatim usurpari debere; quod peritiorum medicorum usu, & experientia confirmatur.”—(But this conclusion is not so plain to me.)—“ C. Hoffmannus, Matthiolus, Fallopius, corticem ligno longe inferiorem esse autumant. Fernelius vero, majorem vim siccandi, attenuandi, ac sudores promovendi ipsi tribuit; verum nimis calidum esse, & jecoris calida siccaque intemperie laboranti & febricitanti multum noxium existimat. Revera quod Fernelius sapore corticis ligno acrioris & amarioris detexerat, quodque experientiâ multâ comperrierat, nobis analysi chymicâ comprobatum videtur.” *Geoff.* ii. 232. But the bark is evidently neither so resinous, nor so aromatic as the wood; does not keep so well, and is commonly inferior to it: And indeed if the wood has half the virtues Mr. Geoffroy gives it, I think we may do without the bark in all cases. As for the analyses, there is reason to suspect their accuracy; and I can draw no good consequence from them.

“ Guaiacum crassa incidit & attenuat, lenta detergit, obstructa aperit & liberat, sudores provocat, urinas ciet, sputa adjuvat, stomachum resolutum corroborat, sicut & alia omnia viscera: diuturnas & inveteratas jecoris & lienis obstructions, ictum, hydropem, aliaque vitia ex iis nata curat: omnium corporis partium superfluos humores frigidos dissipat, atque absorbit: capitis distillationes exhaurit; ex iisque natos dolores rheumaticos dictos, tollit: podagram, chiragram, ischiada, omnemque arthritim mirer juvat; asthmaticos, paralyticos, stupidos, & quovis modo resolutos curat: nervorum affectionibus omnibus subvenit: tumores omnes frigidos & duros ad suppurationem perducit; ulcera cacoethæ & chironia sistit, exsiccant & cicatrice obducit. Lues venereæ pustulas, tubercula, ulceraque omnia, atque omnes ex iis natos dolores, aliaque symptomata, nullâ corporis noxâ, nullaque virium jactura, cohibendi ac tollendi vis & facultas ei tribuitur. Et re quidem ipsâ calidis in regionibus, huic morbo debellando sufficit, modo ut decet curatio instituat. Verum frigidum sub Jove ubi corporum perspiratio minor est, & difficilius promoveri solet, minus tuta medicina deprehenditur. Iam ob rem in hujus morbi curatione guaiaco hydrargyrum consociant.” *Geoff.* ii. 232. Vide *Hessman*, p. 301—307, which may perhaps serve instead of the many treatises we have on this wood, in the Aphrodisiacus, or auctores varii de morbo Gallico.

S E C T. III.

It is given in decoction to ℥j. The resina to ʒβ. We keep neither essential oil, tincture nor extract; but prefer the resina made here, to that rosin brought from America, called gummi guaiaci, because much cleaner. Oleum externe utitur. The wood, which must be rasped down, requires long decoction before it is divested of all its virtues: yea it will suffer several decoctions: for the extract the *New London Dispensatory* orders ligni rasi ℔j. to be boiled four times or oftener, in a gallon of water ad dimidium. “Et scribit bunt quidam, etiam duodecies decoctum; curasse tamen pauperculos quosdam; habet enim balsamum tenacissimum, ut isti loquuntur.” *Hoffman*, p. 306. §. 31.

The method of cure of the French pox with guaiacum was this. The patient being first well purged, was confined to a close warm room; and early in the morning, in bed, drank ℥x. of a strong decoction of it (in which to the quantity rasuræ ℥ij. or iij. and sometimes iv. had been boiled); and, almost smothered with cloaths and heat, sweat two full hours: four hours after he dined on raisins, almonds, and sea-bisket, using for common drink a second decoction of the same rasuræ. Eight hours after this meagre repast, he again took decocti fortis ℥x. sweating two hours after it. And so he went on every day, for fifteen days: on the 16th he was purged; then returned to his sweating diet, for fifteen, twenty, or more days. He was then allowed to put on his cloaths; had a little more liberal diet; and was again purged: but still he was obliged to drink the decoction, and be under a strict regimen for other forty days, or till cured. Vide *Monard. Clus. Exot.* p. 313. Hence it appears that the cure depended more on the regimen, than on the medicine. Rasuræ ℥j. is enough to make of a strong decoction; ℥viiij. or xii. if macerated first, and then decocted in aquæ ℔iv. ad ℔j. Our decoctum lignorum is not so strong.

Guaiaci scobs is an ingredient in the tinctura jalappæ composita & decoctum lignorum, elixir salutis; gummi in tinctura cantharidum; resina in pilulæ Æthiopicæ, pilulæ ecphracticæ, chalybeatæ, and pil. ecphract. purgantes.

N E P H R I T I C U M.

S E C T. I.

Lignum nephriticum, *offic.* Lignum peregrinum, aquam cæruleam reddens, *B. P.* 416. Lignum ad renum affectiones, & urinæ incommoda, *Monard. Clus. Exot.* 324. Lignum nephriticum, *Park.* 1664. *R. H.* 1804. Lignum nephriticum, cæruleo & flavo tingens, *J. B.* 1492. Nephritic wood, is a hard, solid, heavy, yellowish brown wood, of little taste or smell, which by infusion communicates to water a power of reflecting the blue, and transmitting the orange rays of light.

“The chief mark of its goodness is its giving a blue colour to water, which has had the shavings of it infused for four or five hours.” *Miller, Bot.* 267. In aqua limpida maceratum, intra dimidiam circiter horam, eam
“mirabili

"mirabili opalis geminæ colore cæruleo & flavo tingit." *Geoff.* ii. 237. But if a very little of it be scraped with a knife into water it will take the double tincture in a minute, or so. All-bark has the same quality, though not to so high a degree, as I noticed above.

It is brought from New Spain. According to Mr. Dale, p. 337, it is the wood of the tree which carries the *Ibalanus myrepfica*, or ben-nut; that is of the *morinda lentisci folio, fructu magno anguloso, in quo semina erui*, *J. B.* i. ii. 435. *R. H.* ii. 1745. *Pluk. Almag.* 253. Mouringou, (Monringon, *D. le*) *H. Med.* vi. 19. l. ix. See the other synonyma in Dale; and a full account of the nux ben, and of its use, particularly of its oil in perfumes in *Geoff.* ii. 401. ad 409. It is not used in Britain. — It is said to grow in Arabia and Egypt. But the *lignum nephriticum* comes from America, as I said; and is the wood of the *coatlî* (seu *aqueus serpens*) quam alii *Tlapalez-patlî*, seu *medicina sanguinis coccinea*, *Herman.* 119. *R. H.* 1804. Is Mr. Dale right? "Hujus ligni usus, jam diu receptus fuit in his regionibus. Nobis mittit Nova Hispania." *Monard.*

S E C T. II.

The infusion is diluent, resolvent, and a safe diuretic; is said to be lithontriptic, and to purge. It is therefore recommended in the strangury, gravel, stone, obstructions of the viscera, dropsy, &c. though but little used.

"Calfacit & siccit gr. 1°. usus ejus receptus est ad renum vitia, urinæque difficultates, & incommoda. Hinc—in epatis & lienis obstructionibus. Præparationes sunt infusio; quæ in aqua fontana facta, nonnullis potus est sat expetitus, tum ratione saporis, quem fere nullum exhibet, tum quoque coloris cærulei, adeoque amabili. Potest illa dilui vinum. N. adulteratur alio ligno simili, quod aquam croceo colore inficit." *Monard. S. Schroder.* 634. "Est aperitivum & diureticum, educens calculum, arenulas, & mucum: infunditur ad 3ij. in aquæ communis lbiss. & dosis est ad 3ij." *Nucl. Belg.* p. 174. "Urinam leniendo movet. Scribit Hernandez, hujus tincturam vesicam extergere, refrigerare, urinæ acrimoniam temperare, nec non etiam febres extinguere, & colicis mederi. Addit Monardes in jecoris & lienis obstructionibus utilem esse.—Aquæ sapor ligni maceratione nullatenus immutatur. Quidam hujus tincturæ cyathum unum seu 3vij. singulo mane hauriunt. Alii assidue utuntur, eaque etiam vinum diluunt.—Plurimi ejus mirabiles effectus in dolore nephritico calculo, arenulis & urinæ difficultate prædicant. Nonnullos tamen vidi, quos curationis spes frustrata est. De vi lithontriptica, quæ illi tribuitur, valde dubito." *Geoff.* tom. ii. p. 238. Vide *R. H.*—Observe,

1. It is almost insipid, yet pretty agreeable to the taste, scarcely bitterish. "Saporis est moderate acris, & subamari, odore caret." *Nucl. Belg.* "Saporis subacris, nonnihil amaricantis." *Geoff.* "Mirum vero quod saporem aquæ non mutat." *R. H.* "Saporis subacris, amari, aromatici, vini incidentem in lingua relinquens." *Herm. Cynof.* p. 232. Vide *Boyle on Colours*, p. 3. exp. 10, &c. — 2. If an acid be dropt into the infusion, it destroys the blue colour; but by adding an alkali, it is again restored. How long the water will retain this quality I know not; but I kept it more than six years, without

without observing any change. "Post quindecim dies exolefcit virtus," says *Hernandez*. It had however this effect on water after I had kept it eight years. Hence some (vide *Herman. Cynof.* 233.) infer it is alkaline, or contains a mild alkaline falt. It is safe, and perhaps no better a diuretic than sweet water. But 3. *Herman. Cynof.* p. 232. ut & *Albinus in MSS.* & *Chomel*, say, infused in wine, it is purgative, though in water only diuretic. I doubt of this, though I cannot deny it. *Geoffroy* says nothing of its cathartic virtue.

It may be given in infusion or decoction to ʒj. or ʒij. "R Rasur. ligni "nephrit. ʒj. affunde aq. graminis lbß. F. infulum ad nephritidem." *Herm. M. S.* "R Ligni nephrit. ʒiv. Vini Rhenani ʒxvj. F. infulum, saccharo "edulcorandum. Sic habetis gratam potionem." *Albin. M. S.* Vide *Boyle on Colours*, part 3. exp. 10.

L E C T U R E L I.

S A N T A L U M.

S E C T. I.

1. **S**ANTALUM album, *offic.* Santalum album, *B. P.* 392. *Garciaë, Clust. Exot.* 173. *J. B.* i. 486. *Ger.* 1586. *Park.* 1605. *R. H.* 1804. *Dale*, 325. *Geoff.* ii. 240. White saunders, is a hard, solid, heavy, pale, or yellowish-white wood, of little taste or smell.

2. Santalum citrinum, santalum flavum, *offic.* Santalum pallidum, *B. P.* 393. *Ger.* 1586. *Garciaë, Clus. Exot.* 173. Santalum citrinum, *Park.* 1605. *J. B.* i. 486. *R. H.* 1804. Yellow saunders ought to be of a yellow somewhat citrine colour, of an aromatic penetrating bitterish taste, and fragrant smell. As we have it, it is rather brownish than citrine, and even less yellow than the white.

"Santalum citrinum est lignum solidum ponderosum, pectinibus rectis, quo fit ut haud difficulter in rectas assulas findatur, colore ex pallido rufefcente, aut verius flavescente, ac nonnihil in citrinum vergente; sapore aromatico, amaricante, cum acrimonia totum os implente suavi; odore fragranti, moschum nonnihil æmulante, aut sane ex eo ad rosarum odorem nonnihil vergente. Santalum album parum colore differt a citrino: magis pallefcit, pyri ligno quod pallidum sit colore fatis simile: alioqui eadem substantia, eadem textura, & pectines iidem. Sed odore inferius, quippe qui debilis vix percipiatur, uti nec sapor." *J. B.* "Santalum album revera nullam habet in colore, qua a citrino dignoscatur, differentiam: invenitur enim, quod magis flavo, & profundiore sit colore, quam jam dictum citrinum. Quapropter est a prædicto discernendum, odore tantum & sapore." *E. Cordo. J. B.*

They grow in the East Indies; especially and plentifully in the island Timor. Some think them the wood of the same tree; the white being the sap and the yellow the heart. Others that it is white, while young, and citrine when old. Others that they are species of the same genus, or rather varieties differing

differing only in taste and smell. And *Garcias* says there is such an affinity between them, that the natives only can distinguish them: that among innumerable logs of saunders, not one of fifty is yellow; and that it is dearer in the Indies than in Europe: he doubts therefore, whether any true yellow saunders is brought to Portugal. And the best that I have seen does not well agree to the description of the true. “*Flavi fantali flectillimi librale fragmentum, mihi liberale munere dedisti noster Hugo Morganus, Londinensis pharmacopola peritissimus an. 1581. Est vero id grave, solidum, nodosum, colore intus flavum, odore suavi cerebrum reficiens, & grato sapore palatum leniens.*” *Clus. Exot.* 263) who is of *Garcias*’s opinion.

Bontius describes a very odd kind of delirious fever, with which those who go to the islands Solor and Timor to cut saunders are seized: “*Oritur, says he, ex diversis causis, quarum precipuæ hæ sunt: odor recenter cæsarum arborum fantali, quæ, farentibus ipsis incolis, nescio quid virosum e cortice maxime, & cerebro inimicum expirant. Ad hæc, aeris constitutio est hic nebulosa & admodum gravis; nam habitacula incolarum sunt in summis montibus.—Adhuc fructus hic nascentes edendi libertate.—Mutatione subita aeris, &c.*” *Vide B. Medicina Ind.* c. 15. fol. 31. b. Mr. *Geoffroy* transcribes the symptoms, but mentions only the first assigned cause, which, perhaps, is the probable, or real one.

3. *Santalum rubrum, offic.* *Santalum rubrum, B. P.* 393. *J. B.* i. 489. *Garz. Clus. Exot.* 173. *Ger.* 1586. *Park.* 1605. *R. H.* 1805. Red saunders, is a very hard, heavy, solid, red wood, which scarcely colours the spittle, and has neither taste nor smell.

It grows in Tanaferim, and some maritime places of Coromandel. *Garzia.* “*Illo interdum, says he, incolæ sua idola, eorumque delubra fabricant.*” And that is neither sweet to the taste, nor when chewed tinctures the saliva red, whereby it is distinguished from the Brasil wood. *Clusius* and *Ray* say it colours the saliva; but what I tried did not. “*Lapidæ fere duritiei & ponderis sunt, e fantali rubri truncis frusta, quæ delibata importantur, colore intensius rubente quam Bresilium lignum, ut fere nigrescant, pedinibus rectis, densissimis, interdum crispis tuber, aut nodosatum vestigia imitantibus. Odorem nullum evidentem spirant; sapore fere satuo, cum levi adstrictione. Commansum vix modicum salivam rubeo colore tingit: at lintheo affricatum tingit. Cordo. Saporem habet dulcificantem adstringentemque leviter, odorem nullum satum dignum.*” *J. B.* l. c.

The name sandalum is in *Pliny*, lib. xviii. c. vii. p. 450: but it is farris genus, a sort of grain. *Garzias* derives it from, or thinks it a corruption of, *chaudama*, for so the wood is called in Timor and Malacca. See *Clus. Exot.* 247. “*Sandali nomen esse ab Arabibus, puto; quid significat nescio.*” *Hoffman.* 309.

S E C T. II.

The true yellow saunders is probably diaphoretic and diuretic: it is called cordial, and commended in catarrhs, obstructions of the viscera, liporhymies, &c. The white is worth little; the red useless, but for its colour. We might indeed very well want all the three.



“Refrigerant grad. 3. (aliis 2.) siccant 2. aperiunt. Epatica sunt & cardiaca. Usus præcipuus est in lipothymia, palpitatione cordis, obstructione epatis, &c. Extrinsecus in catarrhis, cephalalgia, vomitu, epatis interie calida, in epithem, &c.) N. santalum rubrum magis refrigerat & astringit, quam reliqua. Præparationes sunt, 1. Extractum gummosum cum sp. vini. 2. Species diatrionfantalon. 3. Unguentum Santalinum. 4. Cerotum, seu emplastrum. 5. Trochisci de fantalis.” *Schreder.* p. 673.

The Arabians thought them cold: if their and our saunders are the same, others, with as good or better reason, make them heating. The best of them I think inferior to the worst lignum Rhodium.—I discover no astringency in the red saunders; nor does it blacken a solution of vitriol. I know nothing else it is good for than to give a red colour to the bals. Locatelli, and spiritus lavendulæ compositus; for which purpose it is retained (and is the only fantalum) in the *London M. M.* “Nec refinam habet nec odorem dat.” *Albin. M. S.* In infusion, or decoction in water, it may be said to cool more than the other two, adding nothing that is heating to the menstruum. “Eo modo pharmacopœos ex fide, videant (quod firmiter tenent omnes) an fantali nostri, quicunque illi sint, frigidi sint? Me retinent Monard. & Fallopius. Ille inquit, calefaciunt, & si gustes, & si foris applices. Hic, ex odoris suavitate, ex acredine cum aliquo amarore, & cum decoquo, colligo, non esse frigidos in tertio gradu. Interim, quod mireris, frigidos asserit esse in primo, aut certe in secundo, ne cogeretur deferere Arabas. Quanto sapientius *Guilland*, qui calidos esse in secundo ait,” &c. Vid. *Hoffman.*

309. § 54.

“Tres fantali species sale essentiali acido, oleo spisso & aqua graviore, exigua salis volatilis portione, & multa terra donantur. In citrino tenuius est oleum & uberius, minus tenue in albo, crassius vero in rubro, in quo uberius terra, ut ex eorum odore & sapore satis constat.” *Geoff.* ii. 242. Citrinum potentius incidit, album longe debilius, utroque rubrum potentius astringit. His tribus medici fere omnes virtutem corroborandi, hepatis obstructiones resolvendi, viscerum tonum restituendi, vel augendi tribuunt.—Dosis citrini in substantia a ʒj. ad ʒj. rubri ad ʒij. in decocto ad ʒʒ.” *Id.* ii. 243.

S E C T. III.

They may be given to ʒʒ. or ʒj. in infusion or decoction. I think common saw-dust as good as any of them in substance. The yellow is an ingredient in the confectio alkermes, in place of lign-aloe; in trochisci cypheos, & hedychroi, for the aspalathus; and the red in the emplastrum defensivum, & sp. lavendulæ compositus.

S A S S A F R A S.

S E C T. I.

Sassafras, lignum sassafras, *offic.* Arbor ex Florida ficulneo folio. *B. P.* 431. Sassafras. *Monardi. Clus. Exot.* 320. *Ger.* 1525. *Park.* 1606. *R. H.* 1568. Sassafras,

Sassafras sive lignum pavanum. *J. B.* i. 483. *S. Anhuiba Brasiliensis*. *Piso.* 98. *Cornus mas odorata*; folio trifido, margine plano; sassafras dicta. *Pluk. Phyt.* 222. *Am.* 120. *Laurus*, foliis integris, & trilobis. *H. Cliff.* 154. Sassafras is a light, soft, brownish-white wood, of a subacrid, sweetish, aromatic taste, and very fragrant smell; it is covered with a pretty thick bark, greyish on the outside, non coloured within, of the same taste and smell with the wood.

It grows in great plenty in Florida, Virginia, and many other parts of America. The root is preferred commonly to the trunk. Choose it recent, covered with the bark, (which some think the best part of it) and well-scented. Some have called it xylomarathron, lignum feniculacium; "sapore acri, subtili, aromatico; odore fragrante; ad feniculi odorem accedente." *Geoff.* ii. 244. Yet it smells of tarragon, *Clus.* and somewhat of anise, *J. B.* "It is called cinnamon-wood, on account of its smell, which made the Spaniards, when they conquered Florida in 1538 under Ferdinand de Soto, hope to find that valuable spicery there, which grows only in Ceylon." *Savary Diss.* ii. 1487. The French, who first brought it to Europe, called it sassafras. An quasi laxifraga. *Vid. Hoffman.* 308. "Ligni quoddam genus ex Florida, nunc recens in Hispaniam invehitur, cujus, ante paucos annos, notitiam Gallus quidam mihi dedit, ejus facultates mirum in modum prædicans adversus varios morbos, ut Galli experti erant, ab incolis edocti.—Dicitur Indis pavame, Gallis, nescio quam ob causam, sassafras. *Monard.* l. c. (whose *Hist. de*, pars 1 & 2. came out in Spanish in 1569. and pars 3. in 1574.) It sold at first for 50 livres per pound, (*Savary.* l. c.) but before 1688 at Marseilles it was at but 4 or 5 sols per pound. *Sav. Diss.* iii. 563.

S E C T. II.

It is mildly-stimulating, attenuating, diaphoretic, diuretic, carminative, aromatic, antacid, mucilaginous, antiscorbutic, and vulnerary; and is recommended in the French pox, scrophulæ, scurvy, rheums, green-sickness, barrenness, asthma, &c.

"Officinis inveniuntur: lignum & cortex, qui præfertur ligno, maxime si, ex radice sit, quippe radix reliquis partibus prævalet, adeoque & ejus cortex. Vires. Cortex calfacit & siccatur ad grad. 3. Lignum calfacit & siccatur in 2. attenuat, aperit, discutit, sudores movet. Usus præcipui in omni morborum genere, præsertim obstructionibus tollendis, partibus internis roborandis, in sterilitate emendenda, & venerea lue curanda. N. Instar panacæ in catarrhis habetur. Præparantur, 1. Extractum. 2. Oleum stillatitium." *Schreder.* 674. à *Monardo.*

1. It is remarkably aromatic and fragrant, not very acrid, but sweetish. Its essential oil is heavier than water; yet rises easily in distillation; and therefore flies off in boiling, leaving only its more fixed saline sulphureous and mucilaginous parts, which agree with china in virtues; as its more volatile parts do with anise, though more stimulating. 2. Though soft and porous it keeps much better than is commonly imagined. I have had it twenty years old, and yet greatly aromatic. If the bark is any wise preferable to the wood,

it is on account of its aroma. But I doubt of the roots being better than the trunk. The infusion however differs from the decoction. 3. It, as are most new medicines, was immoderately commended at first. Vid. *Monardes*, *J. B.* &c. It is certainly of great use in obstructions of the viscera and glands, in scrophulous and other swellings, and ulcers. "Curavi magnum quendam virum, fluxione ad dextrum genu laborantem, decocto hoc bene gravido, cum aliis remediis cedere nollet." *Hoffman*. p. 309. It is commended also for the gout, dropsy, intermitting and malignant fevers, nephritic and flatulent colics, palsy, cachexy, &c.

"Analyſi chymica, ex ligni ſaſſafras lbv. extractæ fuerunt olei eſſentialis odoratiſſimi limpidi, flaveſcentis in aqua præcipitis 3x; olei craſſioris, empyreumatici & ruſeſcentis 3vii; ſpiritus acidi lbij circiter; ſpiritus urinoſi 3ij 3v; carbonis lbij 3vii. 3ij, unde cinerum 3vii. gr. lx. & inde ſales fixi ſalſi gr. xlii. & jactura fuit 3xiv. (So that there were terræ 3vii. gr. xviii.)" *Geoff.* ii. 246. Here was very little ſalt, little earth, and a great loſs. The virtues he gives it are but an abridgment of thoſe he gives guaiacum, with which it is often joined, however much theſe woods differ.—"Saporis eſt paululum acris, calidi odoris aromatici ſpecifici, fere iñſtar ſæniculi, præcipue ejus cortex. Eſt aperitivum, alexipharmacum, ſudoriferum, diureticum, cephalicum, ſtomachicum, carminativum, bechicum, & cardiacum; valet ad lueſem veneream, catarrhos, rheumatifmum, arthritidem, cachexiam, chloroſim, febres, præcipue tertianam notham, &c. Ingreditur ordinarie decocta lignorum; datur ad 3ij. Fit oleum ſtillatitium, ſpiritus, &c." *Nucl. Belg.* p. 175. "Saporis ſubacris, ſubdulcis, tenuis aromatici; odoris fragrantis, & ſæniculati. Dicitur ſaſſafras, quaſi ſaxifraga, ob virtutem lithontripticam." *Herm. Cynof.* 222. Saffafras-tea taſtes and ſmells like the wood. Sal vitrioli does not make it either green or black, and precipitates very little. After it ſtood macerating a fortnight in water, the infusion became very mucilaginous and ropy; in which reſpects it agrees with the decoctions of china and ſarſa.

S E C T. III.

It has been given in powder to 3j. but it does better in infusion or decoction to 3ß. (ſome go ſo far as 3ij.) The eſſential oil to viii. or x. drops. The wood is uſed in the aqua benedicta compoſita, (as alſo the bark), and decoctum lignorum. *Monardes* macerates ſaſſafras 3ß. in aquæ lbx. for twelve hours; then decocts it to a third, and gives of the decoction 3x. for a doſe, ſo at moſt it is but the decoction ligni 3j. The remainder he boils to the conſumption of about one ſixth part only in aquæ lbx. pro potu communi. Others decoct ligni 3iß. in aquæ lbij. ad lbj. and give lbß. for a doſe, that is the decoction of 3vi. Vid. *J. B.* "Doſis pulveris 3j. raro præſcribitur; ſed ſæpius infuſum vel decoctum ab 3ß. ad 3ij. Olei eſſentialis a gut. iii. ad xx." *Geoff.* ii. 246. *Johannes Neander Bremæ* published a book called *Saſſafrasologia*, hoc eſt, *Tecmarſis, nobile ſaſſafras lignum dextre ac feliciter, in omnibus ferme humani corporis incommodis, in uſum ducendi.* *Bremæ* 1627. in 4to. *Lind.* 649.

T I N C-

T I N C T I L E.

S E C T. I.

Lignum Campechense. *Offe.* lignum tinctile Campechense. *Pharm. Lond.* 12. Lignum Campescanum. *Offe. Dale* 344. Lignum Campechianum species quedam Brasil. *De Lact. Ind. Occid.* 274. *Sloan. Cat. Jam.* 213. *Hist.* ii. 183. *Rau. Dendr.* 172. "Lignum Campescanum, lignum Indicum. *Mont.* " *Exot.* 8. Ligno Brasiliano simile. *B. P.* 393. Ligno Brasiliano simile, cœruleo tingens. *J. B.* i. 492. Crista pavonis coronillæ folio secunda; sive tinctoria Indica flore luteo racemoso minore, siliqua latissima glabra, lignum rubrum sappan dictum ferens. *Bryon. Prod.* ii. 37. *Fl. Mal.* 92. Erythroxyllum, sive lignum rubrum Indicum spinosissimum coluteæ foliis, floribus luteis, siliquis maximis. *Per. Bat. Prod.* 333. Tiam-Pangam. *H. Mal.* vi. 3. b. 2. *Fl. Malab.* 206. Pataghi, Patanghi, Acacia Zeylanica major tinctoria Panlapan. *H. Mas. Zeyl.* 42. Lignum Sapan vulgo. In India orientali, atque etiam occidentali ontur." *Dale* 344. Hæmatoxyllum. *Lin. G. Pl.* 417. p. 184. Logwood is a pretty solid and heavy dark red wood, of a sweetish subastringent taste, and not disagreeable smell.

It grows in America. Campeachy, a bay in the Gulf of Mexico, in particular is famous on account of the great quantity of logwood that is cut there. "Jamaicæ insulæ indigenæ quotannis aderunt Americæ continentis provinciam Campeche dictam, ubi magnam harum arborum copiam cædunt, lignumque inde Jamaicam adferunt, unde in Angliam, insectorum gratiâ, invehitur." *Cat. Jam.* 213.

S E C T. II.

It is a subastringent, and probably also antiseptic and diuretic; and commended for diarrhœas and dysenteries, taken in decoction and extract.

"Lignum ad tingendum utile, in medicina raro." *Dale* 345. "Campêche wood is used in dying. It contains much oil and essential salt. It is astringent and stomachic." *Lem. Diæt.* 309. "This wood has been but lately introduced as a medicine. A decoction and extract of it are in use in our hospitals, and are said to have proved very serviceable in diarrhœas." *Lewis. Pharm.* p. 15. Observe,

1. By its taste and use in dying it seems to agree with rubia tinctorum, but does not turn the bones of animals red. *Vid. Rubia.* 2. An infusion of it (coarsely cut) in boiling water, after it has stood macerating for a day or two, is of a deep red colour, and sweet subastringent taste. Sp. vitrioli makes it paler, and precipitates a sediment. Ol. tartari does not alter the colour, yet precipitates a little. Mixed with a solution of vitriol it becomes opaque, of a brownish black colour, and somewhat greenish. After macerating in the water more than six months, (viz. from November to July) it neither turned mouldy nor fœtid. The residuum dried was of a brown colour, and had lost
about

about one twelfth part of its weight : that is, of lig. 101 grains there remained 93. Ligni 3j. infused in alcohol vini forty days, lost some grains of its weight.

Its success in fluxes does not depend on its astringency.

S E C T. III.

It is given in decoction to ʒβ : the extractum (prepared the same way as the extractum jalapæ) to ʒβ.

“ R Ligni tinctilis Campech. in pulverem redacti ℥j. coque quater, vel sæpius in aquæ cong. 1. ad dimidium; deinde liquores simul mixti & colati in justam crassitudinem decoquantur.” *Ph. Lond.* p. 31. “ This wood yields its tincture with so much difficulty, that it should be reduced to a very fine powder before boiling.” *Pembert. Disp.* p. 164. *An recte?* Vid. *supra*. It seems neither to need a spirit, nor triple coction in water.

V I S C U S.

S E C T. I.

Viscus. Viscus quernus, *offic.* Viscum, *offic.* Dale 313. Viscum baccis albis. *B. P.* 423. *T.* 610. *T. Hist.* 370. Viscum. *Dod.* 826. *Ger.* 1350. *R. H.* 1583. *Syn.* 464. Viscum vulgare. *Park.* 1392. Viscus quercus & cæterarum arborum. *J. B.* i. ii. 89. Viscum. *Lin. Gen. Pl.* No. 895. p. 473. *H. Cliff.* 441. Miffel or misseltoe.

It is a parasitical evergreen shrub, with a four-leaved calyx monopetalous corolla and four stamina on one part (or rather one plant); and on another, in a four-leaved calyx, an oval germ, somewhat tetragonal, which ripens into a round berry containing a single flat heart-fashioned seed, surrounded with a rough viscid juice. The wood with its bark (both of trunk and branches), and leaves of a yellowish-green colour, and without taste or smell, are reckoned medicinal.

It grows on a variety of trees and shrubs, flowering in the beginning of the spring. The berries, which are about the bigness of white currants, are ripe in October or November, but remain on the plant all the winter, unless the birds devour them; for “ they are food for diverse birds, as thrushes, blackbirds, and ringdoves.” *Ger.* 1351.

Viscus comes from the Greek ἴκος, for so it is called by *Aristotle de Gen. Animal.* l. 1. c. 1. p. 797. *Meteorolog.* l. 4. c. 8. p. 458. by *Dioscorides*, l. 3. c. 103. p. 218. Yea, by *Hippocrates*, or the *Author Libri de internis affectionibus.* *Foes.* p. 549. lin. 41. *Galen. Simpl.* l. 6. p. 48. E, &c. But by *Theophrastus*, ἰξια. *Hist.* l. 3. c. 9. p. 146. & c. 16. p. 234, &c. “ Quod nomen commune, at Stelin Euboensium, Hyphear Arcadium vocabulum esse scribit.” *B. P.* “ Visci tria genera. Namque in Abiete & Larice (*Pino Theophr.*) Stelin dicit Euboea nasci, Hyphear Arcadia. Viscum autem in quercu, robore ilice, pruno sylvestri, terebintho, nec alijs (*aliis autem Theophr.*) arboribus

“boribus adnasci, plerique.” *Plin.* l. 16. c. 44. p. 406. Vid. *Theophr. de Caus.* l. 2. c. 23. p. 260. lin. 4. “Ilex (*ἰλιξ*) fert præter glandem, granum quoddam puniceum; & viscum atque Hyphear habet. Quapropter ut fructus quaternos habeat nonnunquam contingit; binos proprios, binosque alienos; visci scilicet. atque hyphearis. Fert a septentrione viscum, a meridie hyphear.” *Theophr. Hist.* iii. c. 16. p. 234. “Viscum (*ἕξερ*) optimi quid recens est, colore intus porraceo, extra vero subflavo, quodque nil habet asperi aut fursuracei. Confit e fructu quodam rotundo, fruncis in robore (*ἰν ῥοβῶ*) nascentis, foliis buxo similibus. Contunditur fructus, deinde lavatur, tandemque in aqua decoquitur. Sunt qui acinos commanducantes ipsum conficiant. Gignitur quoque in malo, pyro & plerisque aliis arboribus: atque etiam apud fruncem quorundam radices invenitur.” *Dioscor.* l. 3. c. 103. p. 217. Canit *Virgilius*, *Æneid.* l. 6. ver. 205.

“Quale solet sylvis brumali frigore viscum
 “Fronde virere nova, quod non sua seminat arbos,
 “Et croceo sætu teretis circumdare truncos.
 “Talis erat species auri frondentis opacâ
 “Ilce, sic leni crepitabant bractea vento.
 “Corripit extemplo *Æneas*.

“Quare recentiores observarunt in abiete, acere, betula, castanea, cerro, corylo, cotoneo, cynosbato, ilice, larice, mespilo, nuce, olea, oxyacantho, oxycedro, pomo, populo nigra, pruno sylvestri, pyro domestica & sylvestri, quercu, robore, rosis, salice, subere, sorbo, terebintho, & tilia. Veteres arbitrati sunt visci acinis a turdo comestis, quod a pulpani pertinet, concoqui; quod seminis est, incoctum ab alvo dejecti, sistique in arboribus illis, in quibus isti quiescere consueverunt. Sed quasi cornua ex ossibus animalium, sic ex arboribus viscum educi, cum Scaligero *Exerc.* 168, credimus.” *B. P.* 493. “Viscum multis arboribus innascitur. Vidimus in acere minore, fraxino, corylo, tilia, ulmo, salice, sorbo aucuparia, & rhamno cathartica. Malis & pyris, necnon oxyacanthæ frequenter; aliis arboribus rarius innascitur. Apud nos rarissime invenitur in quercu. At quercus latifolia, teste Clusio, per multas Pannoniæ sylvas, visci feracissima est.—In provincia Gallicana, in buxis & amygdalis, viscum alte progerminat & copiose.” *R. H.* 1583.

It was the opinion of Aristotle, and all the antients, that the viscum grew from its own seed, first swallowed by birds, (turdi, palumbes, &c.) and then dunged on the trees. This Scaliger, both the Baulimi, Saracen, &c. reckoned a fable; because they could not see how the seed could stick to perpendicular, much less to the under side of sloping or inclining, branches, where yet it is often observed notwithstanding the winds and rains to which it must be exposed. But the viscosity of their dung, and the influence of the rain in washing the seed off the upper side of the branch, on which it might fall, will account for this. “The mistletoe-thrush doth often carry the seeds from tree to tree; for the viscous part of the berry sometimes fastens the seed to the outward part of the bird’s beak; which to get disengaged of he strikes his beak against the branches of a neighbouring tree, and thereby
 “leave

“ leaves the seed sticking by the viscous matter to the bark ; which, if it
 “ lights upon a smooth part of the tree, will fasten itself thereto, and the
 “ following winter will shoot out and grow : and in the same manner it may
 “ be propagated by art.” *Miller Dict. art. Viscum*. It is true Mr. T. at-
 tempted this, fastening them to such branches of the apple tree and hawthorn
 as they used to grow on, in March and April, but without success, the wind
 and rain always carrying them off. *Vid. T. H. Pl. p. 374*. If others had al-
 ways been as unsuccessful, it would have looked as a confirmation of the opi-
 nion of the antients, that this seed would not vegetate unless it went first
 through the guts of birds. “ *Omnino autem satum, ullo modo nascitur, nec*
 “ *nisi per alvum avium redditum, maxime palumbis & turdi. Hæc est na-*
 “ *tura, ut nisi maturatum in ventre avium, non proveniat. Altitudo ejus*
 “ *non excedit cubitalein, semper fruticosi ac viridis. Mas fertilis, fœmina*
 “ *sterilis.*” *Plin. l. 16. c. 44. p. 409*. And hence the proverb *Κίχλα χεζει*
αυτη καλον. Turdus ipse sibi malum cacat. *Erasm. Alag. 484*. “ Turdus
 “ cacat in sui excidium.” *Colb.*

Although Bradley, Colbatch, &c. speak of the propagation of mistletoe by
 art as a very easy thing ; yet Mr. Barrell’s experiments show that it is not so,
 and that a variety of accidents may defeat the attempt. See *Rich. Bradley’s*
New Improvements of Gardening, &c. London 1717. in 8vo. *Sir John Colbatch’s*
Dissertation concerning Mistletoe, &c. London 1719. in 8vo. in 2 parts, of 30
 and 40 pages. The sixth edition (as it is called) is without the year, and in
 two parts consisting of 72 pages : it has been translated into French.

“ The antients made the mistletoe a super-plant peculiar to the oak,
 “ and tell us, that although it seemingly produced seed, they did not be-
 “ lieve that that seed could possibly be made to vegetate ; because, I sup-
 “ pose, they had tried it in the earth without success. But as it is so fre-
 “ quently growing on other trees besides the oak in our times, I shall take
 “ occasion at once to overturn their opinion in relation to this plant, by
 “ shewing how it may be propagated from seed upon any tree whatever.
 “ About Christmas, when the berries are ripe, they may easily be made to
 “ stick upon the smooth bark of any tree.—The viscous juice will bind it
 “ fast to the part ; and with this small trouble you may expect young plants
 “ the following year, provided you secure them from the birds by a net. I
 “ have seen twenty plants of mistletoe growing upon as many different sorts
 “ of trees and shrubs in one garden, which were propagated in the same
 “ manner I have mentioned.” *Bradley Gard. i. p. 25*. which has been sever-
 “ al times reprinted.

“ The mistletoe-thrush during the winter is nourished from the pulp of
 “ the berries, but the seeds are discharged with the excrement undigested.
 “ Now the excrement, being of a slimy nature, sticks fast to the branches of
 “ the tree upon which it falls ; and if there be any crack in the bark, there
 “ the seed lodges itself, and produces a plant the next year. It has been
 “ often propagated by cutting a slit into the bark of a tree, and sticking in
 “ a seed. I have been told of one that has adorned his trees with it, to
 “ make them delightful in the winter season.—It is supported principally
 “ from the air.” *Colbatch, i. p. 7*.

The

The most particular and best account of this artificial propagation of the viscus, that I have seen, is in a letter to Sir Hans Sloane by Mr. Edmond Barrel, Rector of Sutton in Kent, published in the *Phil. Transf.* No. 397. for *Jan. Feb. and March* 1727. p. 215. Here the author says that, "The mistletoe-seed is flattish, and shaped sometimes like a heart, sometimes oblong (thus O). The oblong put out but one germen; those like a heart have two, which prove two distinct plants. That he endeavoured to sow the seeds, by way of inoculation, which Sir J. Colbatch recommends, in the oak, ash, beech, pear and apple-trees, in Feb. 1719, but he could not make them stick in the cuts; though he had from one (which was of the heart-like shape) stuck in the bark without any cutting a pair of plants.—About the 28th of March 1719, this, with two more on the apple-tree, and one on the pear-tree, began to shoot thus: The viscus matter having stuck the seed on, and, as it dried, drawn the seed close and flat down to the bark, there began to spring out of one end of the seed a small deep-green shoot, very like a short piece of a little clasper of the vine. At first it arose upward from the bark, and then turning again, as it approached the tree, it swelled out somewhat bigger round about the end; yet leaving the very tip or bottom quite flat, forming as it were a foot to stand upon, not unlike the bottom of some brass pestles. This foot, when it came to the bark, about May or June 1719, fixed itself thereon: and being thus fastened at both ends it made a little arch, whose diameter was as long as the seed, or about a tenth of an inch. In this condition it remained all that year, till about March or April 1720; and then that part which was joined to the bark, where the seed first shot forth, let go its hold, and, raising itself upward, put forth leaves, and became the head of the plant; the other end of it, which had taken footing in another place, becoming the root. He says, that he has sowed these seeds on near thirty sorts of trees and shrubs, and yet never had above ten plants that held out the second year. His most thriving pair of plants of 1719, being about three inches in length, were, 21 May 1722, struck off by the falling of a rake-handle against them. They took with them only the outmost skin of the tree, and he could not see any signs of deeper rooting: but on the 12th of March 1723, three or four little buds shot forth, and another by the 18th; which all had leaves that summer; and in Feb. 1727 made a cluster of boughs of four or five joints high, and bore berries in the winter: whereas two others on the same tree, of the same age, and six or seven joints high, had borne none." In another letter to Sir Hans, dated 20 Aug. 1728. *Phil. Transf.* No. 405. p. 547. he has some observations on the difference of sex in mistletoe, and makes some plants carry only male or barren flowers, and others (hermaphrodite, or fertile, which he calls) female flowers; and not the flower on one part, and fruit on another part of the same plant, as *T. B. J.* and *Lin. G. Pl.* editionis 1737. makes it. But *Linnaeus G. Pl.* ed. 1742. agrees with him, making one plant mas, and another (not hermaphrodite however, but) female. Vid. *Eames's Abrid.* vol. vi. part 2. p. 348—352.

Although nothing is to be seen on the part of the tree where the viscum grows but a little tumor, yet by cutting into it, or dissecting it, it will appear that its roots not only penetrate the bark, but also run pretty deep into

the wood, its fibres, (which are of a greenish colour, and easily traced,) being interwoven with and piercing the vessels and vesicles whence it derives its nourishment. Vid. *T. H. Pl.* p. 373. Thus what the earth is to other plants, or rather what the stock is to the graft, or bud united to it, that the tree is to the viscus which grows on it. There seems therefore little reason to prefer the mistletoe of one tree or shrub to that of another. The viscus quercinus is commonly most esteemed. But what can it get from the oak? Astringent! It is nothing less than astringent. Others prefer the viscus corylinus: but it matters not which is taken: they are all equally useful or useless.

“Aiunt Druides solitos fuisse, per adolescentes suos, viscum suum anni principio, mittere, quo viso clamarent omnes annum esse novum: atque hinc manasse quod juvenes hodieque, anni principio ostiatim discurrentes, stipemque carmine poscentes, appellant id Aguilaneuf, quasi a Gui l’an neuf, i. e. ad viscum annus novus. *Voss. Etymolog.*” *R. H.* p. 1584. See Mr. *Du Hamel’s Observations on the Guy. Mem. Acad. Ann.* 1740. p. 677—714.

S E C T. II.

It is antacid probably; is called a specific for the epilepsy, and all convulsive disorders; and commended also for vertigoes, apoplexies, pleurisies, quartans, worms, and I don’t know what.

“Viscum quercus (quod præ reliquis visci generibus probatur) calcacit moderate, seu paulatim emollit, discutit. Usus præcipuus (ac specific.) est in epilepsia. Extrinsecus maturat tubercula, parotides, cæterosque abscessus, cum resina ac cera mixtum. Præparatio est, Gluten. i. e. extractum viscosum e visco, (*birdlime*) quod ingreditur nonnulla emplastra.” *Schrod.* 659.

“Præfertur quernum. In usu sunt lignum, folia, gluten baccarum & corticis. Ligni usus præcip. Specificè in epilepsia, apoplexia, & vertigine. Arcanum quoque est contra pleuritidem. *R. H.* Folia jumentis præbentur ad secundinas retentas ejiciendas: cum ligno etiam viribus conveniunt. Gluten vim habet emolliendi & discutiendi.” *Buxb. Dale* 313. “Ratione terrearum particularum acido absorbentium, & nimium sanguinis motum sistentium, convenit in hæmorrhoidum alvi & mensium fluxu, ut et inflammationibus internis. Forsan ob eandem rationem commendatur in epilepsia & convulsionibus.” *Herman. Cynof.* p. 237.

But, 1. It has neither taste nor smell when dried (as we have it) that I can discover: the berries “are viscous and sweetish.” *T. Hist.* 372. “Folia saporis subdulcis & subacris; baccæ lento & tenaci liquore plenæ, odore quodam grato vinoso, sapore jucundo.” *J. B.* “Lignum est saporis subastringentis. Baccæ introsumptæ glutinositate sua, ventriculo & intestinis obstinatius adhærent, & cum sint acerrimæ, facile excitant hypercatharthes, & viscerum inflammationes, unde inter venena merito collocantur.” *Nucl. Belg.* p. 307. They are rather antacid: and small birds eat them not only without harm, but are nourished by them; though that which is most viscid in them, being separated from their principles, and united becomes so viscid, as to be probably indigestible; for birdlime is dissolvable neither in water nor in spirits: hence viscum is numbered among the “venena or toxica quæ

“constringendo, incrassando, obstruendo, exsiccando, cito vel lenta morte perimunt.” *Bærb. Insistus*. §. 1143. But *Matthiæolus*, p. 590. says, “Novi ego complures, morbi (comitialis) & medicamenti prorsus ignaros, qui ligni loco, vitcum ipsum in catapotiiis devorandum dederunt.” Perhaps in pills it might pass unaltered; but as thus it could do no good, so it ought not to be used internally, as all agree.

2. I poured boiling water on the tops and leaves of mistletoe, not very long dried; and when it had stood macerating three days, the infusion was very transparent, no more tintured than new brandy, and had very little taste, somewhat like that of very weak, long-drawn, and almost tasteless green tea, not acrid in the least, nor sensibly viscid. It only diluted syrup of violets; but gave the tinctura heliotropii a pale Burgundy-red colour, which a little oleum tartari did not destroy, but only made it darker with a greenish cast; which sp. vitrioli took away, making the mixture of a florid-red colour. The solution of vitriol did not in the least turn the infusion either blackish or greenish, it being only diluted by it. Neither did it effervesce or make any ebullition with alkalies or acids. The oleum tartari made its colour more yellow, but did not give it an urinous smell. Hence it is neither alkali, nor acid, nor astringent, nor very sulphureous, nor absorbent, nor aromatic; so not on any account to be numbered among the roborantia; though *Vau Swieten* writes, “Hæc videtur esse ratio quare viscus quercinus tantum nomen obtinuerit in hoc morbo (epilepsia) curando, cum egregiam roborantem virtutem habeat.” *Comment. in Aph.* vol. iii. p. 449.—Sir *John Colbatch* says, Visci cum toto ʒviij distilled by a retort in a sand heat, yielded of acid spirit near ʒij. “much about the same strength, and not much differing in taste from common spirit of vinegar.” What else it afforded he does not tell us, though he increased the heat till the sand became red-hot; and adds, “From the nicest observations I have been hitherto able to make, the principal life and energy of mistletoe consists in its resin, as does that of the Peruvian bark, and Virginian snake root.” Vide *part ii.* p. 10 and 11. His testimony is but a weak proof and wants confirmation, as will presently appear.

3. The ancients say the leaves fatten cattle; and Mr. *Ray* that they are reckoned good ad eorum secundas remorantes ejiciendas. “Hyphear ad saginanda pecora utilius censet *Plinius*. At *Theophrastus*, & viscum, & hyphear, & stelidem multum nutrire tradit. Nam & boves & jumenta hoc pabulo, post messem ali atque pinguescere. Vicia modo purgat primo, addit *Plinius*, dein pinquefacit, quæ suffecere (superfluere *Dale*) purgationi.” *J. B.* i. ii. 94. “Commanducare fruticis frondes & depultæ a jumentis & vaccis, a rusticis nostris, ad secundas remorantes ejiciendas utiles censentur.” *R. H.* 1584. (Can we thence infer that it is nourishing?) “Even to infants there can be no error in giving them too much, but the more they take the better, it being of a nourishing quality, and no ways hot, or in the least tending to throw them into a fever; nay it is rather of itself a febrifuge.” *Colbatch* i. p. 22. That it is hurtful to the tree it grows on, and sometimes kills it, was observed by *Theophrastus*, notante *R. H.* “The late learned Mr. *Perault* informs us, that the mistletoe is a plant of a strong taste and smell; that it is full of a poison, that weakens the tree that nourishes it;

“ that so long as it remains on it, the fruit has always a disagreeable taste ;
 “ and that the way to restore the tree to its former vigour, is to rid it of this
 “ domestic enemy, which returns it a dangerous venom, in place of the
 “ agreeable juice it draws.” *Sav. Diet.* ii. p. 302.

4. As great virtues are attributed to it used only as an amulet, as when inwardly taken ; and some of them not very credible.—Sir *John Colbatch* says that “ Being one day upon a journey, I saw some hazel-trees plentifully stocked
 “ with misseeltoe. It immediately entered into my mind that there must be
 “ something extraordinary in that uncommon beautiful plant.—Having made
 “ the most strict inquiry into the nature of misseeltoe that I was capable of, I
 “ concluded *a priori* that it was a medicine very likely to subdue not only the
 “ epilepsy, but all other convulsive disorders upon the foot of *Marcus Marci’s*
 “ *Hypothesis.*” part i. p. 283. One who could see what nobody else could
 might taste vinegar where no vinegar was. But to come to experience.

In the formerly mentioned book, *De internis affectionibus*, attributed to *Hippocrates*, the leaves of the viscum are ordered for the first disease of the spleen.
 “ Data etiam quæ splenem attenuare possunt singulis diebus ; asphodeli semen,
 “ aut ἰξ στα φύλλα, aut sænum græcum, aut viticis semen, aut rutam,
 “ aut menthæ radicem ; ex his quodcunque volueris, tritum in vino austero,
 “ dato jejuno.” *Hipp. Linden.* ii. p. 238. This is the more remarkable, in
 that it is the only instance that I can find among the antient Greeks, of the
 leaves or any part of the plant’s being used internally. *Dioscorides*, *Galen*, &c.
 all mention the ἰξος, and its use outwardly applied ; but it is the glue, or bird-
 lime made of the fruit of the plant, they call so. “ Viscum discutit, emollit,
 “ attrahit, tubercula, parotidas, aliosque abscessus maturat resinæ parique
 “ ceræ admixtum : epinyclidas quoque in splenio sanat. Vetera autem ulcera,
 “ malignosque abscessus, cum thure mollit ; lienemque absomit cum calce,
 “ aut gagate aliove lapide coctum & impositum. Ungues quoque extrahit,
 “ cum arsenico aut sandaracha illitum. Cæterum cum calce vinique sæce
 “ mistum suam vim intendit.” *Dioscor.* lib. iii. c. 103. p. 218. “ Viscum
 “ explurima aerea, & aquea calida, paucissima terrena substantia constat.
 “ Nam acrimonia in eo amaritudinem excellit. Valenter ex alto humores
 “ extrahit, nec eos tantum tenues, sed & crassiores, eosque diffundit ac di-
 “ gerit.” *Galen. Simpl.* lib. vi. p. 48. & *Art.* i. i. p. 28. “ ἰξος calfacit cum
 “ acrimonia, trahit itaque fortiter ex profundo, & discutit similiter ut thapsia,
 “ sed longe inefficacior quam illa est.” *Paulus*, lib. vii. p. 623.

The antient Druids indeed highly valued the plant, and looked on it as a
 panacea, *omnia sanans*. “ Nihil habent Druidæ visco, & arbore in qua gigan-
 “ tantur (si modo sit robur) sacratius. Jam per se roborum eligunt lucos :
 “ nec ulla sacra sine ea fronde conficiunt, ut inde appellati quoque interpreta-
 “ tione Græca possint Druidæ videri. Enimvero quicquid adnascatur illis e
 “ cœlo missum putant, signumque esse electæ ab ipso Deo arboris. Est au-
 “ tem id rarum admodum inventu, & repertum magna religione petitur : &
 “ ante omnia sexta luna, quæ principia mensium annorumque his facit, &
 “ seculi post tricesimum annum, quia jam virium abunde habeat, nec sit sui
 “ dimidia. Omnia sanantem appellantes suo vocabulo, sacrificiis epulisque
 “ rite sub arbore præparatis, duos admovent candidi coloris tauros, quorum
 “ cornua nunc primum vinciantur. Sacerdos candida veste cultus arborem

“scandit. Falce aurea demetit. Candido id excipitur fago. Tum deinde
 “victimas immolant, precantes ut suum donum Deus prosperum faciat his
 “quibus dederit. Fecunditatem eo poto dari cuicunque animali sterili arbi-
 “trantur, contraque venena omnia esse remedio. Tanta gentium in rebus
 “frivolis plerumque religio est.” *Plinius*, lib. 16. c. 44. p. 409. Who else-
 where describes the glue and its virtues much the same way as *Dioscorides*
 does; but adds, “Quidam id religione efficacius fieri putant, prima luna col-
 “lectum e robore sine ferro. Si terram non attigit comitialibus inderi.
 “Conceptum foeminarum adjuvare, si omnino secum habeant. Ulcera com-
 “manducato impositoque efficacissime sanari.” *Plin.* lib. 24. c. 4. p. 607.
 Is it of the glue or birdlime he speaks here? Probably not; at least he does
 not intend it should be taken inwardly. For in many places viscum is named
 among poisons; and you have visci sumpti remedia; as *Lib.* 20. c. 4. p. 513.
lin. 15. *Lib.* 24. c. 6. p. 610. *lin.* 27. *Lib.* 27. c. 7. p. 671. *lin.* 53. *Lib.* 28.
 c. 10. p. 702. *lin.* 19. & 39. *Lib.* 32. c. 3. p. 679. *lin.* 43, confounding the
 ixia *Dioscoridis*, with the ixia *Theophrasti*. However we find, that the viscum,
 plant or glue, was in Pliny’s time, some way or other, reckoned by some a
 remedy for the epilepsy.

Whether any of the Arabians used the misfiltoe inwardly I know not. But
 in *Gordon’s Libum Medicina*, published circa 1305, the viscus quercinus is
 sometimes ordered for the epilepsy. “Multa enim sunt quæ curant epilep-
 “siam, unum est viscus quercinus, si portetur ad collum, aut quocunque
 “modo sumatur.” *Lib. Med.* fol. 119. b. He has it also in a syrupus ad
 materiam phlegmaticam digerendam, and in another ad materiam melanco-
 licam digerendam: in the first however the viscus quercinus makes not one six-
 teenth of the materials; and in the other about a thirteenth part. In his prog-
 nostica he says, “Dico vobis de epilepsia quod ego habui in cura multos,
 “juvenes, senes, pauperes, divites, viros & mulieres, & fere de omni specie
 “epilepsiæ, & tamen nec per me, nec per alium, vidi aliquem curatum, nisi
 “esset puer, aut provenisset a malo regimine, & quod non multum durasset;
 “tamen sui diligentissimus in omnibus, & patientes obedientes.” *Ibid.* fol.
 119. a. Yet when he comes to treat of the cure he begins thus, “Cum ali-
 “quis est in paroxysmo, si aliquis ponat os supra aurem patientis, & dicat
 “ter istos tres verius, procul dubio statim surget:

“Gasper fert myrrham, thus Melchior, Balthasar aurum;
 “Hæc tria qui secum portabit nomina regum,
 “Solvitur a morbo Christi pietate caduco.

“Quod autem his dictis recte in foramine auris, verum est, probatum est
 “frequenter, quod statim surgit. Et dicitur etiam si scribantur & portentur
 “ad collum quod perfecte curantur. Dicitur etiam quod si pater & mater,
 “vel patiens, vel amici jejunaverint tribus diebus, & postea vadant ad eccle-
 “siam, & audiant missam; & postea sacerdos dicat supra caput evangelium.—
 “Ubi dicitur erat spumans & stridens, & hoc etiam genus Demonii non
 “ejicitur nisi cum jejunio & oratione, &c. (*Mark.* ix. ver. 20.) Et postea
 “quod ille sacerdos, postquam devote & per intentionem legerit supra caput
 “evangelium, scribat, & quod portetur ad collum, curat perfecte procul du-
 “bio.”

“ bio.” *Ibid.* fol. 119. a. Then he gives a variety of medicines, digerentia, purgantia, &c. and says, among other things, “ *Intelligendum quod longus usus metridati curat omnem epilepsiam.*” *Ibid.* fol. 120. b. But on the whole it does not appear he laid great stress on the viscus quercinus in the cure of this disease, or that the fame of this remedy was so great in his day as it came to be afterwards. “ *Gordonius* has left us a large volume called *Lilium Medicinæ*, a book mightily celebrated in those times. But there is scarce any thing remarkable in it, except the troches which now go by his name, and the description of the pulvis ad guttetam, so famous then in those parts of France, and which is in vogue even to this day.” *Freind’s Hist.* ii. p. 263. He is called in the Latin *Bernardus Gordonius*, but in the prefixed privilege to the printers (B.) Gordon. He was a Professor Medicinæ in the university of Montpellier. The book I have is printed at Paris in 1542, in 8vo. consisting of 490 leaves, *i. e.* 980 pages. His proemium concludes thus. “ *Inchoatus est liber iste, cum auxilio magni Dei in præclaro studio montis pessulani, post annum 20. lecturæ nostræ, anno Domini 1305. mense Julii.*” The trochisci are described in his *particulæ sextæ* cap. 10. *De ulceribus renum*, fol. 304. b. and were retained in the *London Dispensatory* till the last edition. As for the pulvis ad guttetam, I cannot find it in him; neither among his remedies for the epilepsy does he mention unguæ alcis, or cranium humanum.

“ Non apud priscos tantum, sed etiamnum hodie apud Christianos superstitiones locum habent circa viscum. Invenias enim qui credant viscum quercinum amuletum adversus veneficia & ludibria Satanæ efficax esse, ideoque e collo puerorum & infantum suspendunt, quo a veneficiis tuti esse queant. Quidam empirici existimant viscum quod quercui, corylo, aut pyro adnascitur, si terram non tetigerit, in pulverem redactum, ac e vino potum comitialibus mederi. Itaque ex eo orbiculos conficiunt, quos ad eundem morbum facere credunt. Alii argento includunt, & inter alia, e collo puerorum & infantum suspendunt. Omnia visci genera, dum viridia adhuc & recentia sunt, tusa, succo extracto, auribusque indito discutiunt collectiones earum, & emolliunt eas intra paucos dies doloremque finiunt. (*E. Trægo*, qui obiit 1554. æt. 56.) Sunt qui querni visci lignum in tenuissimum pulverem redigunt, & comitialibus hauriendum præbeant, quo tantum medicamento, multos fuisse sanatos affirmant. (*E. Matthiolo*, qui obiit 1577. æt. 77.) Adnotandum tamen ligni visci usum in medendo præclarum a doctissimis quibusque haberi, & a plerisque medicis præscribi contra epilepsiam, apoplexiam, & paralysem, multumque in hisce casibus præstari, tum intus epotum, tum vero in collo appensum.—Viscum pyri sylvestris contractione membrorum laborantibus, maximo auxilio esse scimus, ait *Matthiolo*; contunditur id, una cum foliis, & ramis, & cum pinguedine capi recentis. Rami, novitii præsertim, commendantur in fluxu muliebri, & nephritide. Quidam viscum quercinum, qui terram non tetigerit, in aqua rutæ decoquunt, & 40 diebus potandum præbent, & sudare jubent efficaci & probato, ut aiunt, remedio adversus epilepsiam, cui experimento etiam, non parum tribuere videtur *Camerarius* (qui obiit 1598. æt. 64.) *Gentilis*, & *Jac. de partibus* (qui obiit circa an. 1465.) Lignum S. crucis vocant.—Scimus quosdam non inutiliter eo in vino macerato usos, contra vertiginem. Quidam nostro suasu, contusum aquis convenientibus macerant, ut de eo
“ pocillent

“ pocillent pueri contra vermes, egregio effectu.—*Cento, Medicus Wrtemb.* ad epilepsiam commendat. *Nicod. Metri* mirabiliter commendat viscum coryli. “ Eo visci ligno quod in Aronia nascitur arquatos prosperius curatos sibi commertum tradit *Curtius*. Cæterum baccas, cujuscunque sint generis visci, non intra corpus sumendas putat *Camerarius*, quod facile concesserimus, ob insignem lentorem. Idem tradit visci quercini usum esse, in quibusdam locis, ad pleuritidem, epota pulverefati ʒj. ex aqua hordei, vel alia convenienti, non sine solatio ægri.” *Hæc J. B. i. ii. p. 94.*

“ Pulvis visci, maxime quercini, non epilepsiæ tantum medetur, sed & menses mover. Arcanum etiam est contra pleuritidem, semel atque iterum & tertio in aqua cardui & papaveris exhibitus. *D. Bowle*. Visci oxyacantho innascentis pulvis, vino albo, aut Hispanico infusus, & duabus ante paroxysmum horis exhibitus, dosi subinde repetita, si opus fuerit, febrem quartanam non raro fugat, & perfecte sanat.”—“ Est viscum corylinum in epilepsiis, & aliis capitis affectibus, longe efficacius quercino: sed non nascitur in corylo, nisi post centesimum annum, ex opinione *Henrici ab Hiers*. “ Utrovis utaris perinde esse puto.” *R. H. 1584.* The Honourable Mr. *Bye* gives an instance of an inveterate epilepsy cured by means of the true mistletoe of the oak, given in powder as much as would lie on a sixpenny-piece, in black cherry-water, or beer, every morning for some days near the full moon. *Vide Usefulness of Experim. Phil. p. 174.*

Thus the moderns commend the viscum as a remedy for witchcraft, possession of the devil, the epilepsy, apoplexy, palsy, vertigo, otalgia, contractio membrorum, fluxus muliebris, obstructio mensium, gravel, worms, jaundice, pleurisy, quartan ague. While some prefer the quercinum in diseases of the head, and others the corylinum, others reckon both alike. Hence I infer the mistletoe has little effect in any disease, if it be not somewhat antacid: and if any birdlime can be made of its bark, it will confirm this quality yet more. “ E baccis & cortice ligni parari potest viscum ad aucupia.” *R. Syn. ed. 3. p. 464.* (though this is made of the berries only in *R. H. & Syn.* editionis 2dæ.) However viscum is totally neglected now at London, and excluded the *New Pharmacopæia*; and with better reason, than many other simples. It is safe, and may be used for experiments sake. *N. B.* In the *Alta Physico-medica*, vol. i. (edit. 1727.) we have *Geor. Tobia Weismanni Ujus Decretis Visciquerni polychrestus*. Where laudatur ad arthritidem, cachexiam, colicam, asthma, appetitum prostratum, & ad systema nervosum roborandum, cum 3. historiis, p. 422. In iisdem *Actis*, vol. vii. (edit. 1748.) *Jo. Baltasar Ehrhart*, De visci quercini operandi modo in morbis convulsivis, & congeneribus. *Obs. 90. p. 334.* (supposito quolibet, &c.) And in *Comment. Lips.* (edit. 1756.) vol. v. we find among *Jo. Lud. Leberecht Loejeke Selectissima Remedia* the viscus, where-with he cured two miserable epileptics by giving pulveris ejus ʒiʒ. omni trichorio, along with the decoction.

S E C T. III.

It may be given in substance to ʒj. or ʒij, in infusion or decoction to ʒʒ. or more. It is an ingredient in the tinctura cephalica utraque, & pulvis de gutteta or antiepilepticus.

Guttete,

Guttete, or as Charras writes it gouttette, is the epilepsy in the Languedoc dialect, *Lem. Pharm.* 203. so it should be pulvis *ad* guttetam, not *de* gutteta. The oldest author I find it in is *Riverius*, whose *Praxis Medica* was first published Parisiis 1640, in 8vo. "Pulvis epilepticus, de gutteta vulgo nominatus, in vulgaribus pharmacopœis descriptus non habetur; sed in Monspelienfibus officinis vulgo componitur, ex traditiva descriptione, quæ talis est. R Rad. Pæoniæ, seminis ejusdem, dictamni albi, visci quercini, ana ʒß, femin. atriplicis ʒij, cranii humani ʒij. (for ʒijj.) coral. rubri præp. hyacinthorum præp. ana ʒjß. ungulæ alcis præp. ʒß. moschi ʒj. fol. auri ʒj. misce, f. pulvis, cujus ʒß. ad ʒj. frequenter exhibeatur, cum lacte jusculo, & panatellis." *River. Prax.* lib. i. c. 8. In the treatise *De Epilepsia Puero-rum* (*Lugduni* 1679. in folio, p. 179.) are eleven ingredients. In pulv. anti-epileptico *D. D. D. Aquin*, there are eighteen. *Char. Ph.* 258. In *Lem. Pharmacop.* p. 203. there are more. In *Pharm. Lond.* fourteen or sixteen. In the *Eding. Pharmacop.* ed. 1735, fourteen, and so on. All the forms are different from one another; though each retains viscus quercinus, ung. alcis, & cranium humanum. "The author of this powder is not known; probably he was a *Languedoc* physician. It is much used, however, in Languedoc, Provence and Dauphine. It is differently described in several Dispensatories. I have followed the *Pharmacopée de Lyon*." *Lem. Pharm.* 203. The pulvis anti-epilepticus, de gutteta dictus of the *Pharm. Eding.* ed. 1744, was thus made: R Rad. dictamni albi, pæoniæ & valerianæ sylvestris; ac visci querni aa p. æ. f. pulvis. That of the present *Pharmac.* (now called pulv. ad epilepticos) is R Rad. valerian. sylvestris pæoniæ ana p. æ. *M. fiat pulvis.*

N. B. "The tinctura cephalica, says *Lewis*, is a composition extremely singular, with regard to the choice of its ingredients. The roots of casumunar, and wild valerian, and the rosemary-flowers are indisputably well chosen. These coincide in one general intention, and seem to improve and heighten the taste, smell and virtue of each other. But the peony-roots, white dittany, and misseltoe of the oak, are mere expletives. The peacock's dung is too filthy and ridiculous an article to deserve any further notice." *Edinburgh Pharmacop.* p. 130. (ed. 1744.) translated, &c. — It seems to be a prevailing opinion at London, that a composition cannot be *f. artem* unless it pleases both the taste and smell of the patient: though it is very certain that the virtues of many medicines, especially in nervous cases, depend on the disagreeable sensation they occasion. If therefore the three indisputably well-chosen ingredients make an agreeable medicine, the peacock's dung, (which otherwise I would willingly give up), seems necessary to prevent it: or else the rosemary and casumunar should be thrown out. But upon what theory or experiment he rejects the dictamnus albus and peony-roots, or makes them mere expletives, I cannot find; if it be not that they are ill tasted.

LECTURE LII.

OF HERBS and FLOWERS.

ABROTANUM.

S E C T. I.

1°. **A**BROTANUM, abrotanum mas, *offic.* Abrotanum mas, angustifolium majus, *B. P.* 136. *T.* 459. Abrotanum vulgare, *J. B.* i. 192. *A. mas*, *Dod.* 21. *R. H.* 371. Abrotanum mas, *Ger.* 1105. *A. mas vulgare*, *Park.* 92. Abrotanum mas vulgare *Fuchsi*, *H. Ox.* iii. 11. *Artemisia foliis ramosissimis setaccis, caule erecto*, *H. Cliff.* 403. Common sothernwood, or southernwood. Belgicè Averroone, *Ger.*

It grows in Natolia, Syria, &c. yet endures our severest winters. In gardens it flowers in July, though seldom here. The leaves and tops, or young shoots are used. *Herba*, *Pb. Eding.* *Folia*, *Pb. Lond.*

2°. Abrotanum fœmina, chamæcyparissus, cupressus, *offic.* Abrotanum fœmina foliis teretibus, *B. P.* 136. *H. Ox.* iii. 11. *Santolina prima*, *Dod.* 269. *Santolina foliis teretibus*, *T.* 460. *Chamæcyparissus*, *J. B.* iii. 133. *Ger.* 1109. Abrotanum fœmina vulgare, *Clus. H.* 341. *Park.* 95. *R. H.* 359. *Polium Theophrasti*, *Dioscorides*, & *Arabum vermiculato folio*. *Col.* i. 49. & p. 54. *Santolina foliis quadrifariam denticatis pedunculis unifloris*, *H. Cliff.* 397. Lavender-cotton.

It grows in Italy, &c. In the gardens it flowers in July. Frost sometimes kills it. The leaves and tops are used. “*Officin. Nat. Herba seu Folia*, sed “*raro.*” *Schred.* 577.

It is abrotonum in *Pliny*, l. 21. c. 21. p. 562. *Ἀβροτον* in *Theophr. Hist.* l. 1. c. 15. p. 44. Vide *Bed.* 684. *Dioscorides* l. 3. c. 29. p. 184. *Galen. Simpl.* l. 6. p. 40. Not abrotanum, as it is in some moderns; and even in the lately reformed *London Dispensatory*. Ab ἄβροτον, inhumanum; vel ἄβρωτον, cibo inutile; vel ab ἄβρος & τωτος, quia ἄβρος τεννεται, molliter extenditur. Vide *R. H.* “*Ἀβροτερον* quidem significat molle delicatum robor: το ἄβροτανον “*autem nihil significat.*” *Hoffman*, p. 80. “*Dioscoridis fœminam, chamæ-* “*cyparissi nomine, Plinius (l. 24. c. 15. p. 621.) donasse videtur.*” *B. P.* But whether they are the abrotonum mas & fœmina *Dioscoridis*, is uncertain. His description of the fœmina, does not agree to the santolina; and all he says of the mas is “*Alterum mas vocatur, sarmentosum (κληματωδὲς) gra-* “*cilibus ramulis (λαπτοκαρπῶν) velut absinthium.*”

S E C T. II.

Southernwood is a stimulating-aromatic bitter, or an antiseptic-attenuating-diaphoretic and diuretic, called uterine and alexipharmic; and is commended

internally for the jaundice, vapours, worms, &c. and externally for inflammations, pains, tumors, &c. as discutient and anodyne. Some make it a remedy for baldness. — “*Dale* makes southernwood a species of the mugwort: — *Schroder* says it deterges and wonderfully discusses (valide discutit) — that it discusses hysterical (impetus) flatulences, and is good against the king’s-evil (morbum regium solvet.)” *Quincy, Pharm.* p. 113.

Lavender-cotton is a detergent, deobstruent, and diuretic, and is commended in obstructions of urine, jaundice and worms. It agrees much more with artemisia, than with abrotanum in virtues.

“*Abrotanum* (folia & gemmæ seu summitates, collectæ augusto) calfacit, siccatur, incidit, aperit, substringit, extergit, valide discutit, resistit putredini & veneno, moribus venenatorum animalium medetur, vermes necat, urinam movet, impetus hystericos discutit, regium morbum solvit. Extrinsecus usus ejus famosus est in ossibus exsiccandis, roborandisque; & quia pilorum signaturam summitates æmulantur, ad alopeciam tollendam maximopere commendatur. *Præp.* 1. Aqua. 2. Vinum. 3. Conserva. 4. Oleum infusum. 5. Ol. stillatitium.” *Schroder*, 522. *Dioscorides* describes the abrotoninum oleum, l. 1. c. 60. p. 33. & vinum abrotonites, l. 5. c. 62. p. 344.

1. It is of a disagreeably bitter and aromatic taste, and strongly fragrant smell. “*Odor vehemens, sapor amarus & acris.*” *J. B.* It has a pleasant grateful smell, but with a little sourness. *Miller Bot.* p. 3. 2. A tea made with the tops is aromatic, bitter, and not very unpleasant: it only dilutes syr. violarum; reddens a little the tinctura heliotropii; and turns a solution of vitriol to an opaque greenish dirty-black. 3. It is commended outwardly for female obstructions, &c. in baths and fomentations; and inwardly for the asthma, (when mix’d with honey), flatulent and nephritic colics, &c. 4. “*Analysis chymica ex foliorum & summitatum recentium lb v. prodierunt humorum lb iv. ʒiv. ʒvij. gr. xvij. olei ʒxviiij. carbonis ʒv. ʒij. unde cinerum ʒj. ʒviiiß. & inde salis fixi alcali ʒx. (ergo terræ ʒvß.) Et jactura fuit ʒiiij. ʒiv. gr. lv.*” *Secundum Geoff.* iii. p. 3. “*Rarius abrotano intrinsecus utimur, quod Etmullero mirandum & dolendum videtur.—Non adeo fors nostra luggenda est ob parcum abrotani usum, dum frequentior est usus absinthii, quod iisdem viribus donatur & quidem valentioribus: quapropter a nonnullis ut absinthii succedaneum tantummodo proponitur.*” *Ib.* p. 4.

N. B. The way I make tea of plants is this. I pour on the plant boiling water, and let it stand in a tea-pot for a day, (but commonly two or three days,) before I make any experiment with the infusion: and thus I am to be understood when I mention tea of any part of a plant hereafter.

“*Cupressus herba convenit qualitatibus cum abrotano. Ususque præcipuus est in obstructionibus epatis, renum, & ureterum. Curat icterum, lumbricos fugat. Extrinsecus subvenit morbis uteri, &c.*” *Schroder.* p. 577.

For, 1. It is of an aromatic somewhat-bitterish and not disagreeable taste, and pretty-strong smell; neither so fragrant, nor so bitter by far as southernwood. “*Folia odoris medicamentosi, cum quadam suavitate gravi; saporis partim acris, partim amari.*” *R. H.* 2. Summitatum thea is somewhat aromatic,

matic, a little bitterish, with a bituminous or petroleum-flavour, pretty agreeable and sinelling of the plant. It only dilutes syr. violarum : it gives a little redness to the tinct. heliotropii, which ol. tartari does not altogether destroy ; and with a solutio vitrioli it becomes turbid, opake, and greenish. 3. It is said to kill worms. “ Ventrīs lumbricos interimit, quotidiano experimento muliercularum, tum semen, tum herba ipsa in lacte cocta & pota.” *R. II.* 4. *Analysi chymica* fol. & summit. recentium lbv. præbuerunt humorum lbiv. ʒij. gr. lxvi, salis vol. urinosi gr. xl, olei adiposi ʒivss, carbonis ʒviij. ʒvi. unde cinerum ʒij. ʒoj. gr. xii. & inde salis fixi alcali ʒi. gr. viii. (ergo terræ ʒi. ʒiij. gr. iv.) jactura fuit ʒij. ʒi. gr. xxxviii. secundum *Geoff.* iii. p. 7. “ Santolinæ eadem quæ abrotono tribuuntur virtutes. Attamen paulo plus salis volatilis, majorem olei quantitatem suppeditat : unde ad hystericos affectus compescendos, hæc prællare videretur.” *Id.* “ *Coffæus* quidam, Aquilexiensis medicus, teste Garidello, santalinæ foliorum pulv. ʒi. felici cum successu in pleuritide & peripneumonia exhibere solebat. Ejus folia inter laneas vestes sparguntur, ad tineas ab illis arcendas.” *Id. Ibid.*

Hence it appears that abrotonum mas & abrotonum fœmina differ in taste and smell, in their botanical characters and chymical analysis, and consequently in virtues ; the one acting chiefly by its stimulus, the other by its saponaceous detergency. Yet the *London New Dispensatory* allows the use of the abrotonum either mas or fœmina, as the apothecary pleases, as if there were no difference betwixt them. *In limine impingere* in this manner argues no great attention to the *Materia Medica* in the compiler.

S E C T. III.

Either kind of abrotonum may be given in substance to ʒj. in infusion to ʒij. The lavender cotton is an ingredient in the ung. & pulv. vermifug. and in the ung. nervin. I would prefer the southernwood as an anthelmintic.

“ Abrotonum mas a veteribus *ἰατρικὸς βοτάνη* dicebatur ; ab Hispanis etiam hodieque herba lumbricorum. In his Galli usurpant etiam santolinæ semen.” *Hoffman*, p. 81. “ A. maris oleum essentiale commendatur ad paralytica membra ; ac etiam cum ladano & adipi ursina ad pilorum generationem promovendam.” *Geoff.* iii. p. 5.

A B S I N T H I U M.

S E C T. I.

1. Absinthium, absinthium vulgare, absinthium latifolium *offic.* absinthium ponticum, seu Romanum officinarum, seu Dioscoridis. *B. P.* 133. *T.* 457. *A. vulgare majus.* *J. B.* iii. 168. *H. Ox.* iii. 7. *A. latifolium.* *Dod.* 23. *A. vulgare.* *Leb.* 433. *Park.* 97. *R. II.* 366. *Syn.* 188. *A. latifolium, sive ponticum.* *Ger.* 1096. *Artemisia foliis compositis multifidis, floribus subglobosis pendulis ; receptaculo papposo.* *H. Cliff.* 404. Broad-leaved or common wormwood.

It grows in waste and rubbishy places, by highways, &c. in Scotland, as well as in England and more southern countries; flowering in July, and plentifully propagating itself by its small seed.

2. *Abſinthium Romanum*, *abſinthium tenuifolium*, *offic. abſinthium ponticum tenuifolium incanum*. *B. P.* 138. *T.* 457. *A. ponticum vulgare*, folio inferius albo. *J. B.* iii. 175. *H. Ox.* iii. 7. *A. tenuifolium*. *Dod.* 24. *A. ponticum vulgare*. *Clus. H.* 339. *A. tenuifolium ponticum Galeni*. *Ger.* 1096. *A. ponticum ſive Romanum vulgare*. *Park.* 98. *R. H.* 367. *Artemiſia foliis compoſitis multifidis, floribus ſubrotundis nutantibus, receptaculo nudo*. *H. Cliff.* 404. Roman wormwood.

This is not a Britiſh herb, but grows plentifully in Auſtria, Hungary, Thrace, &c. It flowers in July and Auguſt, and increaſes much by its creeping roots.

3. *Abſinthium ſeriphium*, *abſinthium maritimum*, *offic. abſinthium maritimum*, *abſinthium Romanum noſtratibus falſo dictum*. *Pb. Lond.* p. 3. *Abſinthium ſeriphium Belgicum*. *B. P.* 139. *T.* 458. *J. B.* iii. 178. *H. Ox.* iii. 9. *A. ſeriphium, ſive marinum Anglicum*. *Park.* 102. *A. marinum album*. *Ger.* 1099. *R. H.* 370. *Syn.* 188. Sea wormwood.

It grows plentifully in maritime places, and ſalt marſhes, in Britain, Holland, &c. flowering in July, and ſpreads much by the root. “*Mulierculæ botanopolæ Londinenſes abſinthium Romanum vocant.*” *Dale*, p. 99. “This is the Roman wormwood that is uſed in the ſhops, and has been ſo for theſe 100 years, if not much longer; *Parkenſon* complaining in his time, that the phyſicians and apothecaries made uſe of it inſtead of the former, though it came far ſhort of it in virtue; and *Dioſcorides* and *Galen* affirmed, that ſeriphium was hurtful to the ſtomach.” *Miller Bot.* p. 7. And of the former he ſays, “And indeed this is the Roman wormwood that the apothecaries ought to make their conſerve of; whereas they altogether make it of the ſea-wormwood, becauſe more pleaſant and palatable.” *Ibid.* And the London college of phyſicians, or rather their committee, have thrown the true Roman wormwood out of their *M. M.* and ordered the conſerve to be made of the ſummitates *abſinthii maritimi*. If they had had as great regard to their predeceſſors as to the herb-women, they would have retained both, and allowed the uſe of either, ſince the Roman is certainly as good as the ſea-wormwood, (if not better) and eaſily propagated.

The leaves and tops of all the three are uſed, or may be uſed as medicinal. *Abſinthium*, Græce ἀψινθιον, ab α priv. & ψινθος delectatio, quaſi indelectabile, vel quaſi ἀπινθιον impotabile. Vid. *R. H.* There are in *Dioſcorides* three *abſinthia*. 1. “*Abſinthium bathypicron herba eſt vulgo cognita. Præſtantius in Ponto & Cappadocia in monte Tauro apellato naſcitur.*” 2. “*Abſinthium marinum, quidam περιφιον vocant, eſt herba prætenuibus ſurculis, abrotoni parvi ſimilitudine, minutulis reſerta ſeminibus, ſubamara (ὑποπικρος), ſtomacho inimica, graveolens, & cum quadam calfactione aſtringens. Copioſiſſimum in Tauro gignitur, & in Taphoſiri Ægypti.*” 3. “*Abſinthium ſαντονιον, in Gallia (Γαλατία) alpiſus finitima naſcitur; abſinthio eſt ſimile, attamen non adeo ſeminis fœcundum, verum ſubamarum, & ejuſdem cum ſeriphio facultatis.*” Thus *Dioſcor.* l. 3. c. 26, 27, 28. p. 183, 184. According to him therefore the ponticum is the bittereſt, ſum-

mopere

mopere amarum. "Absinthium ponticum multo Italico amarius." *Plin.* l. 27. c. 7. p. 671. But the absinthium ponticum Galeni is not so bitter as the other absinthia, but a more altringent and more agreeably aromatic, they being vehementissime amara. "Porro, adds he, id est tum folio, tum flore
"longa quam cætera absinthia minore: odor quoque non modo non insuavis,
"verum etiam aromaticum quid præferens; reliquis autem omnibus est scæ-
"dus: quare hæc fugere conveniet, uti autem semper pontico." Thus *Galen*
Metb. Med. l. xi. c. 16. clas. 7. p. 72. Hence the absinthium ponticum Dioscoridis & Galeni are not the same; and if we have them both, the A. ponticum Dioscoridis is our A. vulgare, and the A. ponticum Galeni our A. Romanum. As for the absinthium marinum, there is little controversy concerning it, being nowhere in use but in England.

N. B. 4. Santonicum & semen sanctum, offic. sementrina. *Ger.* 961. *Emac.* 1100. Absinthium santonicum Alexandrinum, sive sementina, & semen sanctum. *Park.* 102. Lumbricorum semen vulgare & Matthioli. *J. B.* 111, 180. Wormseed. Ex Alexandria adfertur. Vid. *Dale* 100.

S E C T. II.

Wormwood is a stimulating, attenuating, antacid, antiseptic and diaphoretic bitter. It is called stomachic and hepatic, and commended internally in want of appetite, indigestion, agues, jaundice, dropsy, worms, &c. and outwardly for contusions, tumors, gangrenes, &c.

"Stomachicum imprimis est, hinc hepaticum, & splenicum calfacit 1°
"(ad 2°) siccat 3° grad. aperit, attenuat, astringit, amarum est: hinc vermes necat, bilemque educit, crapulam discutit, sudorem ciet, febribus
"(præcipue tertianis) convenit. N. Capiti, quia vapores crassos exhibet, pigritiem ac somnum inferre solet, minus tamen si prius per aquam calidam
"trahatur, leviterque exprimatur. Extrinsecus arcet vigilias temporibus ac
"plantis pedum impositum, confortat ventriculum, auditum acuit (suffitus
"aure susceptus), &c. Præp. 1. Aqua stillatitia. 2. Spiritus. 3. Succus
"expressus & inspissatus. 4. Vinum absinthites. 5. Tinctura cum sp. vini.
"6. Conserva. 7. Syrupus compositus. 8. Trochisci de absinthio. 9.
"Oleum infusum. 10. Oleum stillaticium. 11. Sal fixum. 12. Sal volatile."
Schroder. 522.

For, 1. It is of a lasting excessively bitter, and somewhat aromatic taste, (not otherwise nauseous,) and pretty strongly aromatic smell. I cannot call it acrid or styptic. "Folia—odore aromatico, gustu item, sed cum pluscula
"amaritudine, conjuncta adstrictione aliqua. Radix abunde calfacit, aromatica gratia, sine omni amarore, os perfundens." *J. B.* iii. 168. "Odor
"totius plantæ aromaticus vehementior, gustus amarus." *R. H.* "Odoris
"est fortissimi aromatici; saporis acris, valde amari, mediocriter calidi."
Nucl. Belg. p. 2. "Folia intense amara, odoris aromatici vehementis." *Geoff.* iii. 8. Foliorum thea tastes and smells of the leaves; dilutes syrup of violets; reddens tinct. heliotropii, and turns a solutio vitrioli to a greenish sooty-black colour, and opaque till it precipitates. Hence it appears to be subastringent, as many aromatic bitters are. 2. There is such a difference between
the

the analysis foliorum, & summitat. in *Geoffroy*, that we cannot draw any consequence from them. Vide *infra* *. 3. It is much commended outwardly as discutient and antiseptic for pains, tumors, gangrenes, and mortifications: and inwardly is of great use for many chronic diseases, *i. e.* such as proceed from a colluvies serosa, phlegmatic viscosity, inertia bilis, and laxity of the fibres; as some cachexies, chloroses, hysteric passions, scurvies, &c. Mr. *Geoffroy* not improperly calls it bilis succedaneum. Hence it must be hurtful in hot, bilious, and inflammatory diseases and constitutions. “Vim habet calfaciendi, altringendi, says *Dioscorides*, concoctiones adjuvandi, bilioaque detrahendi quæ stomacho & alvo inhæserunt. Urinam etiam cit, & crapulam in potu præsumptum arcet. Valet & adversus inflationes, itemque ad discutiendos ventris & stomachi dolores. Anothexias & Icteros sanat ejus infusum aut decoctum.” And after commending it for several poisons, &c. he adds, “Existamatur & expressi succus eisdem præstare effectus. Attamen potionibus improbatur, quod stomacho sit inimicus, doloremque capitis cieat.” l. c. “Common wormwood has been in great esteem, not only as a stomachic and destroyer of worms, but as a great detergent in the jaundice and dropsy. But its use in such intentions is now quite laid aside.—For by its hot and drying qualities it has been observed to hurt the sight, by drying up, or dissipating the animal juices too much, whereby the optic nerves have sometimes also wanted their due supplies.” Thus *Quincy*, ph. 119.—But such-like objections against it serve only to confirm its real virtues and efficacy.

* “Analyti chymica ex foliorum absinthii latifolii nondum floridi lbv. prodierunt phlegmatis limpidi, plantæ odore & sapore imbuti, quod neque alcali neque acidi notas præbuit 3x, 3vi, gr. xlviii. cum oleo essentiali permisto: deinde humoris limpidi odorati, qui debilis acidi & alcali valentioris notas præbuit, lbij, 3xii, gr. xl. tandem humoris mere alcali & sale volatilis impregnati, 3i, 3v, gr. xlviii. salis volat. urinosi 3v. Olei tum tenuis, tum crassi 3i, 3ij. Messa nigra in retorta superstes pendebat 3vi, 3ij, quæ igne reverberii calcinata reliquit cinerum, 3ijß.—ex quibus lixivio salis fixi mere alcali 3i. extracta fuit.—Ex summitatum floribus & seminibus onustarum lbv. prodierunt humoris 3lxiii.” (whereof about 60 primum subacidæ, deinde intense acidæ, ac tandem & acidi & alcali urinosi notas præbuerent; the rest being only alkaline,) “Salis volatilis gr. xxiv. olei 3ij. 3vi. gr. xviii. carbonis 3vii. 3vii. gr. xii. unde cinerum 3ij. 3ij. gr. xxxvi. & inde salis fixi 3i. 3ij. gr. xlii. (ergo terræ 3vii. gr. lxvi.) & jactura fuit 3v. 3ij. gr. xviii.” Thus *Geoff.* iii. p. 11.

2. Roman wormwood is emollient, detergent, deobstruent, and diuretic; agreeing more with lavender-cotton, or rather camomile, than with wormwood: so that it is not so heating or stimulating, but safer in obstructions of the viscera.

3. The sea-wormwood differs little or nothing from the Roman. Both are very little astringent; but the sea-wormwood is yet least so.

“Absinthium ponticum (tenuifolium incanum. *B. P.*) epaticum est præ vulgari; calfacit principio grad. 1. siccatur in princ. gr. 3. minus amarum est, astringit, valide incidit, extergit, discutit, putredini resistit, educit bilem per urinam; proin convenit in omnibus hepatis, vesicæ, bilis, ventriculi affectibus,

“ affectibus ; tormina ventris & uteri sedat ; minus commode autem in mucilaginosi affectibus pulmonum, imprimis ob attractionem adhibetur. Ex-
 “ trinfecus discutit tormina ventris, adeoque & quæ partum subsequuntur ;
 “ infantum vomitum compefcit, &c. Præparata ejus raro pro usu extant.”
Schrader, 523.

1. They are of a bitterish, herbaceous, and somewhat aromatic taste, and pretty agreeable smell. Thea foliorum A. Romani is Littleish, a little aromatic, and has the flavour of chamomile : the solution of vitriol turns it blacker than it does the tea made of common wormwood, and causes a precipitation more slowly ; but syr. violarum & tinct. heliotropii had the same appearance, when mixed with both infusions. Thea fol. abs. marini agrees in every thing with the former, only it does not make the solutio vitrioli quite so black. “ Abs. pontici vulgaris folio inferius albo radices sunt sapore aromatico præmixtæ ; folia odore suavi, sapore subamaro, corymbi vehementiorem spirant odorem, quam folio.” *J. B.* “ Absinthium se ipsum Belgicum, misit nobis siccum, ex Angliæ Londino, M. D. & rei botanicæ studiosissimus Scotus, Jacob. Gargillus.—Sapor minime ingratus, aromaticus quodammodo, majorem adstrictionem quam amarem relapsiens ; ejusmodi fere est absinthii Romani vulgo dicti : odorem nullum spirat. Cohit in horto Gerardus, chirurgus & botanicus, cui nunquam floret.” (*e Gargillo*.) “ Odore est gravi, salsi vero saporis, grati & amari, suo natali loco collectum, translatum vero in hortos, & terram ubi aqua dulcis, multum variat saporem & naturam.” *e Dod.* *J. B.* iii. 178. Vix variat.—2. Neither of them loses much by drying, more than the common wormwood : neither yield they much by simple distillation, though something of the aromatic spirit rises.—3. “ Analyti chymica absinthii tenuifolii foliorum & summitatum nondum floridarum lbv. exhibuerunt phlegmatis odorati, sapidi, obscure sub-
 “ acidi 3xxvi. 3ijß. humoris adhuc odorati & sapidi manifeste acidi & austeri 3xv. 3i. gr. lxiii. humoris turbidi rufescentis sale vol. urin. impregnati 3xxiß. olei 3ij. 3j. gr. xv. salis volatiligr. xix. carbonis 3viii. 3j. gr. xxx. unde cinerum 3ijß. gr. xv. & inde salis fixi mere alcali 3j. 3v. gr. xvi. (ergo terræ 3vii. gr. i.) Jactura fuit 3xxiv. 3j. gr. xvii.” Thus *Geoff.* iii. p. 19. An incredible loss ! “ Abs. pont. tenuif. incanum—medium est inter absinthium & abrotanum.” *B. P.* “ Abrotanum minus Trago : abrotanum album sive scemina Cordo est.” *Ibid.*

“ Roman wormwood astringes, incides, discusses, prevents putrefaction, and carries of cholera by urine—*Etmuller* says there is not a chronic distemper, in which it is not serviceable. A conserve of it is now much in use for weakness of stomach, loss of appetite, and bad digestion.” *Quincy*, ph. 101. *N. B.* It is absinthium vulgare which *Etmuller* so commends. Vide *Etmul.* i. p. 502—504.

The common wormwood, in tincture or extract, is commended in quotidian and tertian agues, by *Ludov. Pharm.* p. 278. “ Sedavi flammæ serpentem gangrænam aqua marina, cui absinthium incoctum.” *Theo. Bartholinus*. Accedit quidam orulorum lachrymatio adeo fervida, ut lachrymæ per faciem decurrentes eandem fere totam aduierent : hic succo absinthii, cum albumine ovorum mixto & applicato sanatus est. *Rufers.* *R. H.* Many observations there are of the effects of wormwood judiciously used ; but I have met with one only of the Roman wormwood, and that is of the dropsy cured.

cured by its conserve. "Quosdam novi hydropicas quasi deploratos, qui ex longo usu comarum absinthii pontici, quæ saccharo adservatæ fuerant, sanitati restitui sunt. (It was a conserve made ex A. p. p. 1. & sacchari p. 3.) "Ex absinthio ita parato, affecto prius purgato, datur quotidie ʒß. tribus horis ante cibum." *Matthiol.* p. 510. "Absinthio tenuifolio eadem tribuntur virtutes, quæ in latifolio dignoscuntur. Minus tamen amarum est, & magis aromaticum; unde palato quidem magis gratum, sed tamen idcirco minus efficax censemus." *Geoff.* iii. p. 20. *N. B.* Common wormwood is often in summer infested with a small insect: yet *Redi* observes, that worms died in a strong decoction of wormwood in 20, 24, or 30 hours time: to which last time only they also lived, when the decoction was made into a soft mud with earth. *Vid. Redi Obs.* p. 159.

S E C T. III.

They may be given in substance to ʒj. or, if not too bulky, to ʒij: in infusion to ʒß: the juice to ʒj; the extract to ʒß; aqua absinthii composita, to ʒj; oleum essentielle ad gut. vij; conserva ad ʒij; sal fixum to gr. x.—The common wormwood is an ingredient in aqua abs. comp. (ed. 1744, it is A. Romanum) tinctura ad stomachicos, and unguentum vermifugum.

"Pulvis exhiberi potest a ʒj. ad ʒj. Flores conditi a ʒj. ad ʒß. Succus expressus ab ʒß. ad ʒij. Oleum essentielle a gut. ii. ad x. Extractum a ʒj: ad ʒj. Sal fix. a ʒj. ad ʒß." *Geoff.* l. c.—De absinthio vulgari tractans, Jo. Veslingius narrabat plures hydropicos a se extracto absinthii percuratos. "è *Velschio.* Salis absinthii ʒj. ʒß. aut amplius, in succi limonum cochl. 1. exhibitum, ad vomitum compescendum, in febribus biliosis, inque ipsa iliaca passione, &c. vix unquam frustratum medicum." *R. H.* 366, 367.

A C E T O S A. *Vide* Roots.

A D I A N T U M.

S E C T. I.

1. Adiantum, adiantum verum, capillus Veneris *offic.* adiantum foliis coriandri. *B. P.* 355. *T.* 543. *H. Ox.* iii. 587. Adiantum. *Dod.* 469. Adiantum, sive capillus Veneris. *J. B.* iii. 751. Adiantum verum, sive capillus Veneris verus. *Park.* 1049. Adiantum verum seu nigrum. *R. H.* 147. Capillus Veneris verus. *Ger.* 1143. *R. Syn.* 123. The true maidenhair.

It grows in Glamorganshire, South France, Italy, &c. "It is brought to us from the southern parts of France, though it is said to grow plentifully in the county of Cornwal." *Miller. Bot.* 14. It is one of the quinque herbæ capillares, which we shall not separate.

2. Adiantum album, ruta muraria, salvia vitæ. *offic.* Ruta muraria. *B. P.* 356. *T.* 540. *Dod.* 470. *J. B.* iii. 753. *R. Syn.* p. 122. Adiantum album. *Tab. Ic.* 796. *R. H.* 146. Ruta muraria, sive salvia vitæ. *Ger.* 1144. *Park.*

1050. Filicula petraea, rutæ facie. *H. Ox.* iii. 585. Acrostici species. *Lin. G. Pl.* 504. White maidenhair, tentwort, or wall-rue.

3. *Adiantum nigrum*, *offic.* *Adiantum* foliis longioribus pulverulentis, pediculo nigro. *B. P.* 355. *H. Ox.* iii. 488. *Adiantum nigrum officinarum*. *J. B.* iii. 742. *R. H.* 152. *Syn.* 126. *Dryopteris nigra*. *Dod.* 466. *Onopteris major*. *Tab. Ic.* 79. *Onopteris mas*. *Ger.* 1137. *Adiantum nigrum vulgare*. *Park.* 1049. Filicula, quæ *Adiantum nigrum officinarum* pinnulis obtusioribus. *T.* 542. Common black maidenhair, or oak fern.

This is made by some, as it may be by all, a succedaneum for the *Adiantum verum*. “*Adianti proprium est, quod liquore perfusum folium non*
“*madefcit, sed ne humoris tantillum quidem ei adhærescere comperitur;*
“*unde & nomen herba accepit. Genera ejus duo, candidum atque nigrum,*
“*ambo ad defluvium capillorum utilia, oleo trita. Nascuntur maxime locis*
“*humidis.*” *Theophr. Hist.* l. 7. c. 13. p. 878. Hence *Adianton*, ab *ἀ* priv. & *διανεμα* madesco, rather than *διανω* marcesco. It is the *Ἀδίαυτον*, aliis *πολυτρίχον* *Dioscoridis*, l. 4. c. 136. p. 292. and is called *Adiantum verum*. *Vid. Plin.* l. 22. c. 21. p. 574. “*Quidam (Adiantum) callitrichon vocant,*
“*alii polytrichon, utrumque ab effectu: tingit enim capillum.—Duo ejus ge-*
“*nera, candidius, & nigrum breviusque. Id quod majus est, polytrichon,*
“*aliud trichomanes vocant.*”—Thus *Pliny*.

4. *Asplenium*, ceterach, scolopendrium, scolopendrium verum *offic.* ceterach officinarum. *B. P.* 534. *Asplenium*, sive ceterach. *J. B.* iii. 749. *T.* 544. *Ger.* 1140. *Park.* 1046. *R. H.* 139. *Syn.* 118. *H. Ox.* iii. 561. *Asplenium*. *Dod.* 468. *Asplenium*, fronde pinnatifida, laciniis alternis, adnatis. *H. Cliff.* 474. Spleen-wort, or miltwaist.

It should be asplenium, not asplenium. “*Ἀσπληνιον*, aliis *σκολοπενδριον*,
“*aliis σπληνιον*, aliis *ήμισιον*, aliis *πτερυξ*, folia habet scolopendræ animali
“*similia, plura ab una radice, in ambitum sparsa. Nascitur in petris, parie-*
“*tibusque confectis e calculis filicibusque, iisque opacis. Nec vero caulem*
“*nec florem, nec semen habet: folia autem filiculæ πολυπόδης modo incisuris*
“*dividuntur, subter flavescentia, hirsutaque, superne vero viridia.*” *Dios-*
“*cor.* l. 3. c. 151. p. 234. “*Asplenium sunt qui hemionion vocant, folius*
“*triennalibus multis, radice limosa, cavernosa, sicut filicis, candida, hirsuta,*
“*nec caulem, nec florem, nec semen habet. Nascitur in petris, parietibusque*
“*opacis, humidis, laudatissima in Creta.*” *Plin.* l. 27. c. 5. p. 669. “*Hunc*
“*locum Plinius omnino corrumpit.*” *Dalecamp.* ceterach: an *απτερυξ*? *Vide*
Bod. p. 1164. b.

5. *Lingua cervina*, phyllitis, scolopendrium vulgare, *offic.* *lingua cervina* officinarum. *B. P.* 353. *T.* 544. *Phyllitis*, sive *lingua cervina vulgi*. *J. B.* iii. 756. *Phyllitis*. *Dod.* 467. *Ger.* 1138. *R. H.* 134. *Syn.* 116. *Phyllitis vulgaris*. *Cus.* *H.* ii. 213. *H. Ox.* iii. 556. *P.* sive *lingua cervina vulgaris*. *Park.* 1047. *Asplenium* frondibus ensiformibus, integris; basi cordatis, inflexis, petiolis hirsutis. *H. Cliff.* 474. Common hart's-tongue, vulgo hic hind-tongue.

Phyllitis, “*φυλλίτις*, quasi foliosum dicas, cum nihil nisi foliosum cespes
“*appareat.*” *B. P.* “*Phyllitis, folia promit rumici similia, sed oblongiora*
“*& magis virentia, sena septenave, recta: quæque parte anteriore lævia*
“*cernuntur, posteriore vero tenues quasi vermiculos annexos ostendunt.*
Vol. II. L “*Nascitur*

“ Nascitur in umbrosis locis, ac viridariis ; gustu acerbo. Neque vero caulem, neque semen, neque florem profert.” *Dioscor.* l. 3. c. 121. p. 224.

6. Trichomanes, polytrichum, *offic.* trichomanes, five polytrichum *officin.* *B. P.* 356. *T.* 539. *H. Ox.* iii. 591. Trichomanes, five polytrichum. *J. B.* iii. 754. Trichomanes. *Dod.* 471. *Park.* 1051. *R. H.* 140. *Syn.* 119. Trichomanes mas. *Ger.* 1146. Asplenium, fronde pinnata, foliolis subrotundis, crenatis. *H. Cliff.* 474. English black maidenhair.

“ Trichomanes, quod & nonnulli adiantum apellant, locis iisdem nascitur, filici simile, at longe exilius : foliis tenuibus, ordine utrinque dispositis, lenticulæ similibus, adversis inter se, in virgulis itidem tenuibus, splendentibus, nigricantibus iisque acerbis.” *Dioscor.* l. 4. c. 137. p. 293. “ Latinius etiam trichomanes dicitur ; officinis polytrichum, quod nomen, secundum veteres, adianti est. Dicitur trichomanes a vi sua, quod rara cute fluentem capillum expleat, & subnasci faciat : *μανον* enim illi rarum vocant, & *τριχα*, capillum : hinc Latinis capillaris dicitur.” *B. P.* 355.

“ Adiantum, aliis polytrichum, pusilla gerit folia, coriandri similia, in extremo incisuris divisa ; virgulas vero e quibus ea prodeunt, nigro colore nitentes, prætenues & palmum altas : at neque thyrsum (*καυλον*) neque florem, neque semen (*καρπον*) profert : radix est supervacua.” *Dioscor.* l. 4. c. 136. p. 292.

All of them except the first are natives of Scotland, growing on old stone buildings, clefts of rocks, &c. and may be found, (except the asplenium,) in the king's park at Holyrood-house. The leaves only are used.

S E C T. II.

They are subastringent, antacid, attenuating, and deobstruent ; and are therefore called pectoral, splenic, and nephritic ; and commended in coughs, asthmas, consumptions, obstructions of the viscera, scurvy, and almost every disease.

“ Adiantum caliditate & frigiditate temperatum est. Exsiccatur, attenuatur, aperitur, extergitur, pulmonum renumque vitiis medetur. Epatis & lienis obstructions referat, urinam & menses ciet. *N. B.* Sunt qui trichomani easdem vires adscribunt, adeoque substitui posse autumant ; alii rutam murariam. *Præp.* 1. *Aqu.* 2. *Syrupus simplex.* 3. *Syr. comp.*” *Schrod.* 526.

“ Ruta muraria, cal. & frig. temperata est, siccatur, digeritur, discutitur, tartaream & viscosam mucilaginem in pulmonibus &c. incidit. Usus præcipuus est in tussi, asthmate, pleuresi, ictero, obstruct. splenis. Valet ad renum & vesicæ dolores, urinam clementer ciet, calculosque expellit. Extrinsecus capillos crescere facit, ulcera manantia capitis abstergit, strumas & abscessus digerit.” *Schrod.* 668.

“ Scolopendrium verum calfacit & siccatur ; saporis acerbi abstergit, spleneticum est. Usus præcipuus est in duritie lienis, ictero, febris quartana ; urinam movet, calculum comminuit, menses ciet, semen imminuere creditur (nocte effossum). *N. B.* *Dioscorides* folia in aceto fervere facta, per dies 40. pota, lienem absumere scribit.—*Præp.* *Syrupus de scolopend.*” *Schrod.* 677.

“ Scho-

"Scolopendria vulgaris refrigerat ac siccatur, substringit, attenuat, splenica
 "itidem & epatica est. Usus præcipuus est in liene tumido, fluxu alvi,
 "expulsione sanguinis. Extrinsecus mundificat vulnera & ulcera.—*Præp.*
 "Aqua ex foliis." *S. brod.* 677.

"Trichomanes adiantum (ut et rutæ murariæ) facultatibus omnibus respon-
 "det, ideoque eo recurrendum. Peculiariter tamen monet Tab. quod aqua
 "stillatitia imprimis proficua sit iis, quibus jecur putrescere incipit." *Schro-*
der. 674.

1. They are all of a sweetish subastringent taste, and earthy or agreeably
 musty smell. "Ab adianti nigri radix degustata dulcedinem cum magna ad-
 "strictione lingua percipit. Ruta muraria gustu est nonnihil acerbo, & sub-
 "astringente, cum tantillo dulcedinis leuiusculæ vestigio. Asplenii folia sa-
 "porem adstringentem, & aliquantulum tenuem habent. Phyllitidis sapor
 "subacerbus, odor *Dodonæo* graveolens. Trichomanis sapor mixtus, astrin-
 "gens, subdulcis, subamarus." *J. B. l. citatis.* All belong to the same tribe,
 and are frequently conjoined in prescription.—2. Probably they yield much
 the same principles, if analysed the same way. Yet the analysis adianti nigri
 trichomanis, & linguae cervinæ in *Geoff.* iii. p. 36, & 734. differ considerably
 in the quantity of the oil, fixed salt, and jactura.—3. They are extravagantly
 commended by both ancient and modern authors. *Ex. gr.* According to *Di-*
scorides, "Adiantum asthmaticis, dyspnoicis, ictericis, splenicis, dysuria la-
 "borantibus, decoctum auxiliatur. Calculum frangit, alvum sistit, venena-
 "torum moribus resistit, menses & lochia ciet, sanguinis rejectionem inhibet;
 "alopecias densat; strumas dissipat. Facitque & gallinaceos & coturnices
 "pugnaciores in cibum eorum additum." &c. *Mesue* makes it a purger of
 puitie and bile, and a purifier of the blood. *Matth.* 832. And an abstract of
 its vires, as delivered by *Petrus Formius*, *M. D. Monspeliensis*, in a book pub-
 lished by him on this plant, anno 1644, in French, takes up almost a page of
R. H. viz. 147. "Adiantum Monspeliense a P. Formio . . . tanquam pa-
 "nacea & medicamentum universale, ad omnium fere corporis partium sa-
 "nitatem tuendam & morbos debellandos, vel solum sufficiens commendatur.
 "Sed encomiastarum more in ejus laudes nimis effertur. Ejus virtutes longe
 "remissiores & debiliores esse, usus & experientia demonstraverunt." *Geoff.*
 iii. 38. who himself is prolix enough; and, according to his unfair method,
 copies this, and a great deal more from *R. H.* without naming his author.

"Analyti chymica ex adianti nigri (*off. J. B.*) foliorum lbv. prodierunt,
 "humoris lbiv. zij. gr. xlv. Olei adiposi 3ij. zij. gr. lxvi. Carbonis 3ix. zij.
 "gr. xviii. unde cinerum 3ij. 5j. gr. x. & inde salis fixi alcali 3vii. gr. xxxviii.
 "jactura fuit 3ij. 3vi. gr. xv. Ex polytrichi (sive trichomanis) foliorum
 "lbv. prodierunt humoris lbij. 3xii. zij. gr. i. Olei 3ij. 3viß. Carbonis 3vi.
 "3vii. gr. lx. unde cinerum 3ix. gr. xxxvi. & inde salis fixi alcali 3j gr. lvi.
 "jactura fuit 3ix. 3vii. gr. xlvii. Ex linguae cervinæ foliorum recentium
 "lbv. prodierunt humoris lbiv. 3iv. 3i. gr. xxiv. Olei 3i. 3vi. gr. xii. Car-
 "bonis fuere 3vij. 3v. gr. xxxvi. unde cinerum 3j. 3vi. gr. xlvi. &
 "inde salis fixi alcali 3i. gr. iv. jactura fuit 3ij. 3ij." Thus *Geoff.* iii. p. 36,
 & 734.

S E C T. III.

They may be given in substance, in infusion, decoction, and syrup *ad libitum*. Drachms, yea ounces, can have little effect; but a ptisan made of any of them, and used *pro potu ordinario* for some time may do service. The adiantum verum, or trichomanes, is an ingredient in the syrupus de althæa, & syr. pectoralis.

Of these capillary-herbs there is only one in the *London M. M.* viz. trichomanis, of which and liquorice-root the *Syr. pectoralis Pb. Loudinensis* is composed.

L E C T U R E LIII.

A G R I M O N I A.

S E C T. I.

AGRIMONIA, eupatorium, eupatorium Græcorum & Avicennæ, *offic.* Eupatorium veterum; five agrimonia, *B. P.* 321. Agrimonia *offic. T.* 301. Agrimonia, *Cæs.* 319. *Ger.* 712. *R. H.* 400. *Syn.* 202. Agrimonia five eupatorium, *Dod.* 28. Agrimonia seu eupatorium, *J. B.* ii. 298. Agrimonia vulgaris, *Park.* 594. Eupatorium veterum; five agrimonia inodora, vel minus odora, *H. Ox.* ii. 614. Agrimonia foliis omnibus pinnatis, fructibus hispidis, *H. Cliff.* 179. Common agrimony.

It grows near hedges, on the borders of corn fields, and in pasture grounds; flowering in June and July. "Agrimonia, quod in agris abundat." *B. H.* Aliis ab ἀγριμων; "Sunt qui nescientes ab anemone sylvestri, distinguere agrimonem dictam & papaver rhæas, propter florem in puniceo colore convenientiam eupatorium errore ducti argemonem apellant." *Dioscor.* l. 2. c. 207. p. 164. Vide *Bod. in Theophr.* p. 887. "Agrimonia ab ἀγρις acumen, because the fruit of agrimony is garnished with prickles." *Lem. Diss.* 13. "Eupatoria regiam auctoritatem habet." *Plin.* l. 2. c. 6. p. 635. "Sunt qui velint nomen ab inventore Mithridate cognomento Eupatore habere.—Hoc eupatorium est Græcorum & Avicennæ, & eupatoria Plinii: quibusdam ejusdem Plinii agrimonia in arvis nascens." *B. P.* In what sense eupatorium can be said to have folia quinquefolii aut cannabidis by *Dioscorides* l. 4. c. 41. p. 258. and by *Pliny* l. c. Vide *Bod.* p. 887. The leaves and tops are used.—Indeed I cannot find agrimonia in *Pliny*.

S E C T. II.

It is said to be antiseptic, subastringent, antiscorbutic and vulnerary; and internally is recommended in diseases of the liver and spleen, the scurvy, cachexy, internal ulcers, rickets, fluxes, hæmorrhages, &c. and externally in baths and fomentations, for luxations, œdematous swellings, proclivitas ani & uteri, &c.

"Epatica

“ Epatica nobilissima imprimis est, hinc splenetica, vulnerariaque; calfacit & siccatur. 2. Substantia est tenuis, aperit, detergit, subastringit, corroboret epar, ejusque fluxus coerces, adeoque usu creberrimo venit in morbis ab epatis imbecillitate subortis, ut sunt hydrops, cachexia, &c. Eximie-
 “ cus adhibetur sapissime in balneis & lotionibus. *Præparata* 1. Aqua sil-
 “ latia ex integra planta circa finem Junii collecta. — 2. Succus ex foliis &
 “ floribus. — 3. Syrupus ex succo. — 4. Sal. com. ex cinere.” *Schroder* 529.

1. It is of a subacid, or salish-subastringent taste; and pretty agreeable aromatic, or, as it were, balsamic smell, though not very fragrant. “Folia
 “ sapore subacri, cum quadam adstrictione, flores sunt suaveolentes.” *J. B.*
 “ Agrimony is of a styptic taste, a little saltish mixed with something of acri-
 “ mony, and reddens a-little the blue paper.” *T. Hyg.* p. 47. “Saporis est
 “ primo subaulteri, salini, dein amaricantis; odoris parum citrati.” *Nucl.*
Belg. 10. — 2. Foliorum thea is of a brandy-colour, herbaceous subastringent
 taste, somewhat resembling that of very weak bohea-tea. It only dilutes syr.
 violarum; reddens a-little tinct. heliotropii: vitriol turns it very black, and
 causes a slow precipitation. Oleum tartari makes it first yellow, then orange-
 coloured and turbid till a whitish sediment falls to the bottom.—The eighth in-
 fusion agrimonie odorata foliorum siccatorum gr. xlvij. in aquæ bullien-
 tis ʒiv. turn’d black by putting to it a-little sal vitrioli, though each of the
 former infusions had stood in maceration some days, and all the liquor had
 been pour’d-off every time. Hence it appears that the powder in some cases
 may be much preferable to the infusion. — 3. It is commended in mictu invo-
 luntario in powder by *Riverius*: for the mania in decoction by *Doleus*: for
 mictus cruentus & gonorrhœas by *Weaelius*: and is numbered among the sti-
 mulantia aromatica; aperientia deterfiva ad ulcus pulmonum, nephritica, scor-
 butica leniora, & antirachitica in *Boerb. Lib. de M. M.* “Utiliter quoque in
 “ decoctis adversus luem veneream paratis permiscitur, teste S. Pauli, qui re-
 “ fert quendam in luis ven. curatione celebrem, eam pro secreto specifico ha-
 “ buisse.” *Geoff.* iii. 48. Vide & *R. H.* I am informed that *Boerhaave* pre-
 scribed to the late famous Lord *Lowat* the use of agrimony-tea. — “Aquam
 “ destillatam assidue potam efficacissimum contra calculum Petrum Bembum
 “ expertum fuisse referunt. Quin etiam *Petrus Forestus* de quodam scribit,
 “ cui lapis in vesica erat, cum crebro herbam hanc cum ovis comedisset, la-
 “ pidem per frustra cum lotio tandem expulsus fuisse. O! utinam tali li-
 “ thontripica virtute donetur.” *Geoff.* iii. 50.

“Analyti chymica agrimonie foliorum recentium lb v. præbuerunt humo-
 “ ris lbij. ʒxj. ʒiv. gr. xii, olei ʒj. ʒvß, carbonis ʒv. ʒv. gr. xxvi, unde ci-
 “ neris ʒj. ʒvi. gr. xx. & inde salis fixi alcali ʒviiß. (ergo terræ ʒvi. gr. xlvi.)
 “ Jactura fuit ʒij. gr. lx.” According to *Geoffroy* iii. 47. But here the sum
 total is only lbiv. ʒv. ʒvij. gr. lx. so that there are wanting of lbv. no less
 than ʒx. gr. x. “Ex hac analysi, & sapore quem folia referunt austero sub-
 “ salio, cum acrimonia quadam, & ex quodam tenui rubore, quo eorum suc-
 “ cus chartam cæruleam leviter tingit, concludere licet, hujus plantæ virtutes
 “ referendas esse ad salern tartaro vitriolato, vel sal coralliorum (made with
 “ spir. of verdigris) similem, “cum pauco sale ammoniacali conjuncto,” (this
 “ is his own addition) utroque multo sulphure crasso involuto.” *Geoff.* l. c.
 from *T. Hyg.* p. 47. unnamed. “Sunt qui dicunt agrimoniam pulvinari sub-
 “ jectam,

“jectam, dormientem tamdiu somno vinculum detinere, donec removeatur.” *Boeclerus in Herm. Cynos.* p. 500. “Folia contusa ad ani procidentiam utiliter “usurpantur.” *Geoff.* iii. p. 49.

S E C T. III.

It may be given in powder to ʒj, or much more; in infusion, decoction, juice, or syrup, ad libitum.

“Agrimony is used in aperitive, cooling, and vulnerary ptisans, decoctions, “broths, and potions.” *T.* l. c.

A L C H I M I L L A.

S E C T. I.

Alchimilla, fanicula major, *offic.* Achimilla vulgaris, *B. P.* 319. *T.* 508. *Clus.* *H.* ii. 108. Alchimilla, *Dod.* 14. *Ger.* 949. *R. H.* 208. *Syn.* 158. Achimilla major, vulgaris, *Park.* 538. Achimilla perennis viridis major, foliis ex luteo virentibus, *H. Ox.* ii. 195. Pes leonis, five alchimilla, *J. B.* ii. 407. (est 398. i.) Alchimilla, foliis palmatis, *H. Cliff.* 38. Ladies-mantle, bearsfoot, lion's paw, great fanicle.

It grows in meadows, and hilly pastures; flowering all the summer. “Pes leonis, a forma foliorum; vulgo alchimilla, quod alchimistarum præconiis “celebrata sit.” *B. P.* “Stillaria *Matth.* Drosera & drosium, *Cord.* Stella “herbæ *Ital.* *Gesn.*” *Id.* “Sanicula in officinis duplex est, minor quæ & “diapensia; & major, quæ peculiariter alchimilla, a chymistis tracta voce, “nescio quo sensu. Utraque est novitia, & veteribus ignota.” *Hoffman*, 440. The leaves are used.

S E C T. II.

It is a subastringent, antiscorbutic, and vulnerary; and commended in fluxes, hæmorrhages, wounds, ulcers, ruptures, &c. internè, & externè. It may be used, like agrimony, in any form.

“Vulneraria est e nobilissimis non postrema; caliditate & frigiditate temperata; consolidat, adstringit, extergit, sanguinem incrassat; proin utilis est fluxui mensium, &c. Usuque adhibetur interno in potionibus vulnerariis, tum & externo. *Præp.* Aqua ex integra planta collecta Junio cum floribus.” *Schrod.* 529.

1. It is of a subastringent herbaceous taste, and no smell. “Folia & radix “adstrictione vehementi participant, atque ideo exsiccant.” *J. B.* 398. k. vol. ii. l. 17. “Sapor foliorum est austerus, radicis autem valde austerus.” *Nucl. Belg.* 12. — 2. Foliorum thea is of a beautifully-pellucid brandy-colour, and herbaceous taste, and is not sensibly astringent, (though a solution of vitriol turns it to a bluish-black, and causes a slow precipitation.) It only dilutes syr. violarum; reddens a-little tinct. heliotropii, but not the blue paper.

paper.—Hence not strongly astringent, though as such, 3. It is commended in many cases. “Reprimat & ubera virginum, laxiora aut nimium tumentia, duriora efficiens,” *Dod.* 145. For ulcers, wounds, &c. in fomentis, unguentis, emplastris. And internally also. “Decoctum ejus epotum interanea vulnera, rupturasque glutinat. Et quod dictu mirum est, tanta ejus plantæ in glutinando vis est, ut ramices intestinorum, in pueris potissimum, sanare possit. *Fuch.*” *J. B.* In fluxu mensium nimio, fluore albo, hæmoptoe, mictu cruento, diabete, dysenteria, &c. laudatur.

“Analyti chymica alchimillæ foliorum recentium lbv. per B. V. distillatæ, præbuerunt phlegmatis limpidi, herbaceo sapore, primum obscure acidi, deinde manifeste acidi lbj. 3x. humoris manifeste acidi & sub finem aliquantisper austeri lbj. 3j. 3iv. gr. xviii. Folia residua pendebant 3xvij. 3viiss. quæ per retortam exhibuerunt humoris rufescentis tum intente acidi, tum alcali urinosi 3ij. 3j. gr. xviii. olei instar syrupi crassi 3xiv. gr. vi, carbonis 3viij. 3vi, unde cinerum 3iv. gr. xxxviii. & inde salis fixi salis 3iv. gr. lix. Jactura fuit 3vi. 3v. gr. xxx.” *Geoff.* iii. 52.

A L L I A R I A.

S E C T. I.

Alliaria, *effc.* Alliaria, *B. P.* 110. *J. B.* ii. 885. *Ger.* 794. *Park.* 112. *R. H.* 792. *Hesperis allium redolens*, *H. Ox.* ii. 252. *T.* 222. *R. Syn.* 293. *Erysimum foliis cordatis*, *H. Cliff.* 338. Sauce-alone, or Jack-by-the-hedge.

It grows by hedges, banksides, &c. is annual, and flowers in the spring; later if sowed in gardens in the spring. The leaves are used, though seldom. “Alliaria eo quod folia digitis comminuta, allium, seu porrum sectivum, cum nasturtio redolant: quibusdam thlaspidium secundum *Crates*; aliis alethorophos *Plinii* l. 27. c. 5.” (670.) *B. P.* 110.

S E C T. II.

It is an acrid, antacid, diuretic plant; and commended internally for inveterate coughs, scurvies, vapours, &c. and externally, for foul ulcers, gangrenes, &c.

“Aperit, incidit, tenuium est partium. Interne urinam ciet, venenum expellit, tussim veterem sanat, dolores colicos sedat. Externe putredini resistit, unde gangræna, ulceraque putrida, atque maligna sanat.” *Dale*, p. 201. “Vix ea hic utimur; alibi eam scordio substituunt.” *Nucl. Belg.* p. 12.

1. It is of an acrid, bitter taste, and smells of garlick. “Folia sapore & odore allii mitiore.” *R. H.* *J. B.* “This plant is very bitter, stinks of garlick, and reddens a little the blue paper. By a chymical analysis it gives, besides acid phlegm, volatile salt, fixed salt (tres lixiviel) much oil and earth.—*Cas. Plinius* and *Illidanus* say that the powder of the leaves cures carcinomatous ulcers.” *T. H. B.* p. 200.—2. It loses much of its acrimony by drying;

drying; and is alcalescent or putrescent. Foliorum thea is not much tinctured, and very transparent; of a subacid herbaceous taste, and scarcely bitter. Oleum tartari gave it a muddy whey-colour, but not a urinous smell. Solutio vitrioli made it a little brownish; but did not precipitate any thing. It turned the syr. violarum greenish; diluted infus. heliotropii, as pure water would have done, without changing its colour; and did not in the least redden the blue paper. Yet — 3. It is much commended as an antiseptic, for gangrenes and mortifications. *Fab. Hildanus* (Cent. 2. Obs. 44.) writes “Succus, alliarie in “gangrænis, ulceribus putridis & sordidis magnarum est virium, ut a fre- “quenti experientia edoctus sum.” *R. H.* and *Boerhaave* is said to have cured a gangrene from a compound fracture of a man’s leg with this herb bruised with wine and applied to the part. See what is called his *Historia Plantarum*, p. 437. It is of use in gangrenes, as it promotes a suppuration and separation; but it requires vinegar, or wine, or the like to make it an antiseptic: and is more properly classed among antacida alcalescentia, & scorbutica acriora, with armoracia, &c. in *Boerb. Lib. de M. M.* Vide etiam *R. H.* “Ufus ejus “(ait) est ad embammata, sive intinctus: rustici pro fassamentorum condi- “mento utuntur. Recens urinam ciere dicitur, sicca veneno adversari, si in “vino coquatur.—Scordium ut odore ita & viribus refert.”

“Analyfi chimica, ex alliarie foliorum recentium lb v. prodierunt humo- “ris lbivß. 3j. gr. lxx. falis volatilis 3ß, olei 3j. gr. lx. Carbonis fuere 3iv. “3iij, unde cinerum 3ij. 3j. gr. vi. & inde falis fixi alcali 3vi. gr. l. (ergo “terræ 3j. 3ij. gr. xxviii.) Jactura fuit 3iv. 3iij. gr. xlv.” *Geoff.* iii. 58.

The dose is not determined: it may be used like scurvy-grass, or water-creffes, with which it agrees in virtues.

ALTHÆA. Vide Roots.

ANAGALLIS AQUATICA.

SECT. I.

Anagallis aquatica, becabunga, *offic.* Anagallis aquatica minor, folio subrotundo, *B. P.* 252. Anagallis aquatica flore cæruleo, foliolo rotundiore, minor, *J. B.* iii. 790. Anagallis sive becabunga, *Ger.* 620. Anagallis aquatica vulgaris, sive becabunga, *Park.* 1236. Anagallis rectius veronica aquatica, minori folio subrotundo, *R. H.* 852. Veronica aquatica minor, folio subrotundo, *H. Ox.* ii. *sect.* 3. t. 24. *H. L.* 622. *T.* 145. Veronica aquatica, rotundifolia, becabunga dicta minor, *R. Syn.* 280. Veronica foliis oppositis, lævibus, crenatis; floribus laxè spicatis, ex alis, *H. Cliff.* 8. Common brooklime, *vulgo* water-purpy.

It is very common here in open springs, rills, and running ditches; flowering in June. The anagallis aquatica major, folio subrotundo, *B. P.* Anagallis aquatica major, & minor folio oblongo, *ejusdem*, are but accidental varieties, according to *Morison* and *Linnaeus*. Any of them may be used indifferently.

Becca-

Beccabunga or becabunga is said to be a German name. "Quibusdam
 "sum *Dioscoridis* l. 2. c. 154. sed folia olus-atri defunt, & inodora sunt; aliis
 "cepea *Dioscoridis* l. 3. c. 168. sed folia portulacæ hæc non habet." *B. P.* 252.
 We call them purslane, and purpy; and this water-purpy on account of the
 similitude betwixt them. "Beccabunga fere crescit instar portulacæ." *Nuch.*
Belg. 40. "Cepæa, *κίττα*, portulacæ similis est, verum nigriora habet folia,
 "radicemque tenuem. Folia in vino pota, stranguria & vesicæ scabie la-
 "borantibus opitulatur." *Dioscorid.* l. 3. c. 168. p. 241. Vide *Dod.* 593.

S E C T. II.

It is an antiseptic subastringent vulnerary herb; and commended internally
 chiefly in the scurvy, internal ulcers, and obstructions of the viscera; and ex-
 ternally as a discutient and detergent.

"Calfacit, moderate humectat. *Ufus Præcip.* in scorbuto: urinam, calcu-
 "lum renum & vesicæ insigniter expellit, menses ciet, sætum mortuum ejicit.
 "Extrinsicus opitulatur phlegmonis & erysipelati, maculas faciei abstergit (cum
 "sulfure) vulneribus medetur (cum sale comm. & tela araneorum impos.)
 "*Præpar.* 1. Aqua ex integra planta. 2. Succus, expressus inspissatus: qui
 "raro extat." *Schrod.* 533.

1. It is of a disagreeable bitterish taste, scarcely rough or but a little sub-
 astringent, and no peculiar smell. "Sapor plantæ nullus manifestus." *J. B.*
R. H. Geoff. iii. 161. "Tota planta est succulenta, insipida, & temperata."
Nuch. Belg. 40. "Anagallis, sive becabunga, *Ger.* tota gustu est nasturtii,
 "odore non ingrato." *H. Ox.* ii. 324. "It is acrid, bitter, styptic, and red-
 "dens the blue paper; so seems to contain a salt resembling the oxyfal dia-
 "phoreticum *A. Salz.*" *T. Hæst.* p. 238. But neither the juice nor tummita-
 tum thea reddened the blue paper. The solution of vitriol turned this tea to
 a deep green colour; but the tea when weak only diluted syr. violarum; and
 rather greened, than reddened an infus. heliotropii: But strong tea (made by
 macerating the herb four days) did evidently redden a solutio heliotropii; and
 had something of the flavour cochleariæ.—When kept long, it neither be-
 comes sour or putrid.—2. "Apud veterinarios in magno est usu, ea namque
 "in discutiendis tumoribus, & sananda equorum scabie, aliisque id genus af-
 "fectibus curandis utuntur, teste Trago." *J. B.* iii. 791. It is commended
 externally for the hæmorrhoides cæcæ, condylomata ani, scorbutic ulcers, &c.
 Vide *R. H.* And—3. Internally for the jaundice, green sickness, spleen, rheu-
 matic pains, diseases of the skin, &c. It is an "aperiens deterisivum ad ulcus
 "pulmonum, antinephriticum, & antiscorbuticum medicamentum lenius;"
 in *B. Lib. de M. M.* But I am doubtful concerning its antinephritic virtues.

"Analyti chymica ex beccabungæ floridæ lb v. prodierunt, humorum
 "lbivß. 3ij. gr. xxviii, olei 3xii. gr. xxiv. carbonis fuere 3iv, unde ciner.
 "3xij. gr. vi. & inde salis fixi salis 3v. gr. xlv. (ergo terræ 3vi. gr. xxxiv.)
 "Jactura fuit 3ix. gr. xx." secundum *Geoff.* iii. 161. Whence he concludes
 its essential salt is not unlike the *sal mirabilis Glauberi*. But I cannot see any
 thing wherein they agree.

Authors generally make the brooklime and water-creffes agree in virtues. "Viribus becabunga cum nasturtio aquatica convenit, nisi quod imbecillior sit." (*R. H.*) Although they are very different. "Beccabungam menses, fluidosque & tenues humores sistendi & incrassandi virtute præditam esse, *Theodorus Corbeius* in sua *Pharmacia Francofurti edita* 1656, affirmat, experientia id testante." *Geoff.* iii. 161.—But Mr. Corby goes too far: its astringency is too mild to incrassate, or stop the menses, in my opinion.

S E C T. III.

It may be used any way, and in large quantities: *ex. gr.* the green herb may be eaten, as a fresh sallet: or the juice expressed, *per se*, or with nasturtium aquaticum may be drank to ℥iv. once or twice a day. It is one of the plants used in our succi antiscorbutici.

ANAGALLIS TERRESTRIS.

S E C T. I.

Anagallis, anagallis terrestris, *offic.* Anagallis Phœniceo flore, *B. P.* 252. *T.* 142. *Park.* 558. *R. Syn.* 282. Anagallis mas, *Dod.* 32. *Ger.* 617. *R. H.* 1023. Anagallis Phœnicia mas, *J. B.* iii. 369. Anagallis flore Phœniceo, *H. Ox.* ii. 568. Anagallis foliis ovatis, *H. Cliff.* 52. Male-pimpernel.

It grows in corn-fields, flowering in June and July. The anagallis cæruleo flore, *B. P.* called anagallis fœmina, is but a variety from the colour of the flower: there are several such varieties. "Anagallidis duo sunt genera, quæ flore distant. Nam quæ cæruleo est flore fœmina dicitur; mas quæ Phœniceo. Frutices sunt exigui in terra jacentes, quibus folia in quadrangulis cauliculis, pusilla, subrotunda, ad folia helxines accedentia: fructus rotundus." *Dioscor.* l. 2. c. 209. p. 165. "Anagallida aliqui corchoron vocant. Duo genera ejus: mas flore Phœniceo, fœmina cæruleo, non altiores palmo, frutice tenero, foliis pusillis rotundis, in terra jacentibus: nascuntur in hortis & aquosis." *Plin.* l. 25. c. 13. p. 644. The herb is used.

S E C T. II.

It is attenuant, and diuretic; said to be alexipharmac and vulnerary; and is commended for the scurvy, epilepsy, melancholy, madness, rabies, plague, consumption, internal ulcers, the dropsy and gout, &c.

"*Officin.* folia cum floribus, sed raro. Utraque calfacit & siccatur, amara est, exergit & subastringit. Unde & pro vulneraria habetur; morbi canis rabidi subvenire a nonnullis commendatur: adhibeturque usu interno ac externo. *Præpar.* 1. Aqua ex integra planta. 2. Succus: raro extat, cum tamen maxime commendatur in errhinis." *Schrod.* 533. In *Boerb. Lib. de M. M.* Stat utraque inter antiscorbutica leniora.

1. It is of an acrid, bitterish and subastringent taste, and no smell. *Herbæ thea* is acrid, irritating chiefly the root of the tongue. It dilutes syr. violarum; reddens a-little tinct. heliotropii; and with solutio vitrioli becomes of a blackish-grey colour. "Sapor totius plantæ acris." *R. H.* "It has an herbaceous, styptic, saltish taste, and reddens much the blue paper; the fruit reddens it more." Vide *T. Hist.* p. 245. and *Geoff.* iii. 90. "Sunt folia sapore fervida." *Boccler. Cyn. Contin.* ii. p. 365.—2. It is commended chiefly in maniac and melancholic deliria, and for the epilepsy. "*Willisius* in mania pro specifico venditat decoctum anagallidis flore purpureo; item summitatum hyperici." *D. Soami e Dolæo. R. H.* 1024. "Mulier quædam Lutetiæ aqua ex Phœnicea anagallide destillata multos suffusione alborantes curavit." *J. B. Ibid.* 1023. where this water, with milk, is commended for consumptions, and called expertum multoties medicamentum. "In mania succus vel decoctum ad ℥iv. ter die propinatur." *Geoff.* iii. 90.

"Analyſi chymica anagallidis maris totius floridæ ℥v. præbuerunt humorum ℔iv. 3vß, olei 3x. gr. xxxiv, carbonis 3vij. 3j, unde cinerum 3iv. 3vij. ac inde falis fixi falſi 3ij. gr. xxi. & jactura fuit 3v. 3vij. gr. xii." secundum *Geoff.* iii. 89. Neither he nor *T.* seem to have tasted this herb.

A N E T H U M.

S E C T. I.

Anethum, *offic.* Anethum hortense, *B. P.* 147. *T.* 318. *H. Ox.* iii. 311. Anethum, *Dod.* 298. *Ger.* 1033. *J. B.* iii. 2. 6. *R. H.* 415. Anethum hortense, sive vulgare, *Park.* 886. Anethum fructu compresso, *H. Cliff.* 106. Dill, or anet.

It grows without cultivation in *Spain* and *Portugal*. But with us it is commonly sown in gardens, or sows itself there annually; flowering in July. The leaves, flowers or flowering tops, and seeds are used.

It is a small, roundish, flat-margined, brown seed, of a warm aromatic taste, and fragrant heavy smell, stronger than that of fennel.

Anethum, Gr. ἀνηθον. "De cujus etymo nugantur grammatici." *Bod. in Theophr.* p. 743. "Est nisi una planta apud *Dioscoridem* (l. 3. c. 67. p. 201.) & *Galenum* (*Simpl.* l. 6. p. 43. B.) apud *Theophr. Hist.* l. 7. c. 4. plura sunt genera, quæ tamen in digitos non mittuntur. *Dioscorides* cum non describat (*Maranta* 2. *Meth.* 14.) ex aliis ejus locis concinnat, ut & *Cæsalpini* ex *Theophrasto* solet." *Hoffman.* p. 109. "Ἀνηθον, παρὰ τὸ ἀνευθεν, quod cito crescat." *B. P.*

"Huc ades, O formosæ puer, tibi lilia plenis
 "Ecce ferunt nymphæ calathis; tibi candida Nais
 "Pallentes violas & summa papavera carpens,
 "Narcissum & florem jungit bene olentis anethi.

Virgil. Eclog. 2. v. 45.—An recte pallentes?

S E C T. II.

It agrees with meum in virtues: it is said to be anodyne and hypnotic; and is commended chiefly for the hiccough, vomiting, flatulent colics, especially the seed. The summitates, or comæ florentes, are more used in anodyne and discutient epithems, cataplasms and clysters than inwardly.

“ Calfacit in principio 3. siccatur in princ. 2. digerit, discutit, maturat, lenit
 “ dolores, auget lac, conciliat somnum, venereos appetitus minuit, singultui
 “ vomituique medetur. Et hæc omnia præstat usu interno & externo. Ini-
 “ primis tamen extrinsecus, clysteribus anodynis immiscetur; capitisque cata-
 “ plasmatis anodynis & somniferis (summitates cum oleo olivarum coctæ.)
 “ *Præp.* 1. Aqua, ex integra planta, (rari usus est.) 2. Oleum insolutum,
 “ ex foliis & floribus. 3. Oleum stillatitium, ex semine.” *Schrod.* 534.

1. It is sweetish, subacid, and aromatic, and more disagreeable to both taste and smell than the fœniculum. 2. “ Frequentius potum (comæ seminis-
 “ que decoctum) oculos hebetat, & genituram restinguit.” *Dioscorides* l. c.
 “ Oculis nocere & visum hebetare dicitur: quod nobis mirum videtur, cum
 “ fœniculo (quod omnium consensu visum acuit) simillimum sit, tam qualita-
 “ tibus, quam facie externa, nec minus potenter flatus discutit.” *R. H.*
 But if too much used it may prejudice the sight as much as apium: though both perhaps are vulgar errors. 3. The seed is made a specific for the singultus: the leaves and tops are little used but in pickling cucumbers; and in the oleum anethinum.

“ Analyfi chymica ex anethi summitatum floridarum lb̄ v. prodierunt hu-
 “ morum lb̄ iv. 3iv. 5j. gr. xxii, olei 3ij. 5ij. gr. xii. carbonis fuere 3v. 3iv.
 “ gr. xii; unde cinerum 3ijß. gr. liv. & inde salis fixi alcali 3j. gr. lx. (ergo
 “ terræ 5xi. gr. lxvi.) & jactura fuit 3xi. 3vi. gr. li.” *Secundum Geoff.* iii. 91.
 But here the sum total is lb̄ v. 3vii. 3vi. gr. xxiv. so that there are 7 ounces, 6 drachms, and 24 grains too much. “ Anethum ratione ejus olei & ammo-
 “ nicalis salis, inter carminantia recensetur medicamenta. . . Vis anodyna a
 “ nonnullis ipsi tribuitur: somnum vere conciliare valet, & dolores pacare,
 “ non diversa ratione ab ea qua crocus, nux moschata, & alia aromata oleosa
 “ hujuscemodi consopire valent.” *Id.* p. 92.

S E C T. III.

The seed may be given to 3j. or more: the oleum essentielle to gut. v. or vi. on sugar, or some proper vehicle. The *Pharm. Edinb.* retains only the oleum infusum foliorum, it should be foliorum & florum, or ex summitatibus: the *London Pharm.* only the oleum essentielle ex seminibus.

“ Ad singultum contumacem a frigida causa, R Olei ex semine anethi
 “ gut. iv. olei amygdalarum dulcium 3ß. f. haustus. Ad singultum nullis
 “ remediis cedentem, hoc unum habuit *Osbo Hearnius.*” *R. H.*

ANGELICA.

ANGELICA. *Vide* ROOTS, Vol. I.APIUM. *Vide* ROOTS, Vol. I.

A R T E M I S I A.

S E C T. I.

Artemisia, *offic.* Artemisia vulgaris major, *B. P.* 137. *T.* 460. Artemisia vulgaris, *Park.* 90. *J. B.* iii. 184. *R. H.* 372. *Syn.* 190. Artemisia latioris folii, *Dod.* 33. Artemisia mater herbarum, *Ger.* 1103. Artemisia latifolia vulgaris major, *H. Ox.* iii. 5. Artemisia foliis pinnatifidis, planis, laciniatis; floribus erectis, *H. Cliff.* 404. Common mugwort.

It is very common indeed in our corn-fields, &c. flowering in July. "Quascunque regiones peragraverim (inquit *Clusius*) nulla fuit in qua Artemisiam, universæ, ut puto, Europæ familiarem, crescentem non viderim." *R. H.* No matter whether it be caule purpurascente, or ex viridi-albicante;—the red or white mugwort. The leaves and tops are used. "Herba." *Pb. Edin.* "Folia." *Pb. Lond.* "Summitates, cum semine incluso: quin et tota herba, eaque tum rubra, tum alba." *Schrod.* 539.

"Artemisia dicta, ab *Artemisa*, *Mausoli Carie regis uxore*, quæ hanc sibi, ut loquitur *Plinius* l. 25. c. 7. p. 636. adoptavit, cum antea *παρθενίς*, i. e. virginis, quod virgo dea illi nomen dederit, vocaretur. Sunt qui ab *Artemide* *Ilithia* cognominatam putent; quoniam privatim fœminarum malis, quibus *Agræus*, i. e. *Diana* præest, medeatur." *B. P.* Mugwort, that is pot-weed; though *Park.* thinks it should rather be called maiden-wort.

There are few simples, which so often occur in *Hippocrates* as artemisia. "Si secundæ statim a partu non discesserint . . . Omnibus autem præstare novimus artemisiam herbam, et dictamnium, ac Leucoii flores." *De Morbis mul.* l. 1. p. 608. But whether this is the plant may be doubted. "Artemisia in maritimis plerumque nascitur, herba fruticosa, absinthii similitudinem; nisi quod est majoribus, pinguioribusque foliis: quanquam est quædam lætior, habitiorque, foliis virgultisque latioribus, altera vero tenuioribus. Flores sunt parvi, tenues, candidi, et graveolentis: æstate autem floret." *Dioscorides* l. 3. c. 127. p. 226. *Vide* *Bod. in. Theophr.* p. 1151. where it is not badly described.

S E C T. II.

It is a detergent, deobstruent, subaromatic, diuretic, alkaliescent, emollient, diaphoretic, and antiscorbutic; called uterine, and commended in obstructionibus mensium et lochiorum, partu difficili, retentis secundinis, and hysteric fits, both outwardly and inwardly used.

"Uterina est, calfacit 1. siccat 2. aperit, discutit, menses, foetum, secundinas pellit, fordes abstergit; adeoque usus creberrimi est mulierculis, quæ eam adhibent interne et externe, adeo ut vix balnea, seu lotiones parent in
" quibus

“ quibus artemisia non contineatur. *N. B.* Rubra efficacior habetur albâ,
 “ proin et communior. *Præpar.* 1. Aqua, ex summitatibus et foliis.
 “ 2. Oleum stillat. (raro extat.) 3. Syrupus compositus. 4. Sal, ex planta
 “ incinerata. *N. B.* Sunt qui carbonem sacro *Joh. Baptistæ* die sub radice fos-
 “ sam, ad epilepsiam commendant. Exhibent autem tum in pulvere, tum
 “ suspendunt de collo.” *Schrod.* 539.

1. It is of a subacid or saltish herbaceous, and as it were bituminous taste, and pretty strong aromatic smell. “ Radix, sapore subdulci et aromatico; folia sunt suaveolentia, sapore dulciusculo et subacri.” *J. B.* “ Corymbi . . . odore aromatico et satis grato, minus quam absinthii vehementi, ad lavendulæ odorem quadantenus accedente.” *R. H.* “ It has a little saltish herbaceous taste, (*l'armoise a un petit goût d'herbe salé*) and reddens a little the blue paper.” *T. Hist.* 177. — 2. Artemisiæ thea has a bituminous, or petroleum-flavour, more remarkably than the herb; it only dilutes syrup of violets; and with vitriol becomes turbid, dark, and greenish. Cum abrotano sæm. convenit. 3. In baths and fomentations it cleans and relaxes the skin, and promotes perspiration: and hence, perhaps, it is so much commended against lassitude. “ Artemisiam et elelisphacum alligatas qui habeat viator, negatur lassitudinem sentire.” *Plinius* l. 26. c. 15. p. 664. Elelisphacum is a planta nunc ignota, says Mr. *Geoffroy*, iii. 121. But any dictionary explains it; or *Pliny* himself, l. 22. c. 25. p. 584. “ Nostri, says he, qui nunc sunt herbarii, Elelisphacon Græce, Latine salviâ vocant, mentæ similem, canam odoratam.” And salvia is as well known as artemisia. “ Nuncupatur præterea Belgis. *S. Jeans Krayt*, i. e. herba *S. Joannis*, vel si quis mavult *Jani* . . . Sed cur *Jani* herba dicta? Non alia de causa videtur, quam quod ejus decoctum hominum ex itinere lassatorum pedes adeo recreet, ut nihil in rerum natura reperiatur, quod ei sit conferendum.” *Bodd. in Theophr.* p. 1152. Thus also it may be of service in pains, spasms, and tumors. “ Novi, inquit *S. Pauli*, vetulam quandam, cujus utraque genua cum obsedisset tumor insignis, oedematosus, quæ linteis duplicatis, super artemisia suffumigatis, eum ex voto abegit.” *Vid. R. H.* 373.—“ Coqui duram anserum carnem teneriorem efficere solent, eam artemisiæ foliis infarciendo, antequam coquantur.” *S. Pauli.* 207. *Geoff.* iii. 122.—4. Though internally it is chiefly used for female disorders, yet it is also recommended by some for coughs, nephritic pains, jaundice, dropsy, head-ach, sciatica, &c. It stands among the anti-scorbutica leniora, as well as uterina, in *Boer. Lib. de M. M.* “ The fresh herb, or the juice, taken is a special remedy, upon the overmuch taking of opium: and three drams of the powder of the leaves, taken in wine, is a speedy, and the best certain help for the sciatica.” *Park.* 92.

As for the coals found at the root of this plant on *S. John's day*, See *Bod. in Theophr.* p. 1152. and *J. B.* 3. 189. *Bodæus* seems to have great faith in their virtue. *J. B.* contemns it, and all such superstitious impositions. Mr. *Geoffroy* thinks, “ virtutis non prorsus expertis sunt illi carbonēs;” but says they are not coals, but old, dead, and dried roots, “ semiputrefactione nigricantes factæ.” *Vid. tom.* iii. p. 123.

“ Analyti chymica ex hujus plantæ recenter collectæ, lb̄ v. prodierunt humoris lb̄ iv. ʒvij. ʒjß. olei adiposi ʒij. ʒvi. gr. iv. salis volat. gr. xlii. carbonis ʒvß. (unde cinerum ʒij. ʒß. et inde salis sizi alcali ʒij.ß. & jactura fuit ʒiij.

ʒiij. gr. lxii. secundum *Geoff.* iii. 120. who gives it an ammoniacal salt.—Here is little fixed salt, and a very small loss. Does this agree with the tenuitas partium?

S E C T. III.

Mugwort may be taken in substance, infusion, and any other way ad libitum. Drams, or even ounces, will not do much. Syrupus artemisiæ comp. kept its place in *Pharm. Edinb.* till 1744, when it was thrown out. “An extract, conserve, syrup, are prepared from artemisia . . . Some take the leaves and flowers by way of tea; or in ptisans for vapours.” *T. H.* 177.

ASARUM.	} <i>Vide</i> Roots.
ASPARAGUS.	
ASPLENIUM.	

B A L A U S T I U M.

S E C T. I.

Balaustium. *Off.* Balaustium. *Tab. Ic.* 1033. Balaustia flore pleno, majore. *B. P.* 438. Balaustia. *Ger.* 1450. *B. Hispanica.* *J. B.* i. 82. Malus punica sylvestris major; five balaustium majus. *Park.* 1510. *R. H.* 1463. Punica flore pleno majore. *T.* 636. The balaustine tree, or double flowered pomegranate.—It is a variation of the

Punica, malus granata, *offic.* Malus punica sativa. *B. P.* 438. *Park.* 1510. *Parad.* 428. Malus punica, *Dod.* 794. *J. B.* i. 76. *R. H.* 1472.—10. *M. granata* five punica, *Tab. Ic.* 1033. *Ger.* 1450. Punica quæ malum granatum fert, *Cæs.* 141. *T.* 636. Punica *Linnaei*, *G. P.* 212. *H. Cliff.* 184. The pomegranate tree. This is the malus punica sylvestris. *B. P.* improved by culture.

They grow in South-France, Italy, Spain, and other southern countries. Here the winter often kills the tops; and they flower not till September, though they do in May and June in their native climate. We use only the balaustia and malicorium.

Balaustia, or flores granatæ mali, are large, double, scarlet, rose-like flowers, standing in a thick skinny or woody calyx.

Malicorium, sidium, cortex granatorum *offic.* is the thick firm skin of the fruit of the pomegranate tree; both are of an astringent taste, without any smell.

“Africa . . circa Carthaginem punicum malum cognomine sibi vendicat; aliqui granatum apellant.” *Plin.* l. 13. c. 19. p. 333. Communiter malum granatum, ab interiorum granorum multitudine: aliis a granata Hispaniæ regione. quod in ea copiosè proveniat.” *B. P.* 437. It is in *Theophrastus* and *Dioscorides* *ῥα*, which is the name of the fruit also.—By *Hippocrates* it is called *σιδῆ* (whence *σιδιον* cortex fructus :) though he also uses *ῥα*. l. 11. *de Morb. Mul.* p. 641. l. 40.

Cytini, *κυτιναι* are the flores sativæ punicæ in *Dioscorides* and in *Galen*, *Simpl.* l. 6. p. 59. *H.* (and in sundry other places, as *κατ. τοπ.* l. 4. c. 8. p. 157. he says, mali punici

punici sativi flores cytini appellati). But l. 6. *κατα τοπους* p. 168. G. Cytinus is fructus rudimentum: It is the calyx in *Theophrastus* and *Pliny*.—Balaustium is the flower of the fertile punica of *Plin.* (l. 23. c. 6. p. 599.) But flos sylvestris, according to *Dioscorides*. Vide l. 1. c. 151---154. p. 76, 77. “Ex acerbis punicis hic vulgus coria maxime perficere novit, ob id malicorium apellant medici.” *Plin.* l. 23. c. 6. p. 599. Vide *B. P. f. B.* and *Bod.* in *Theophrastum*.—“Primus pomi hujus partus, florere incipientis, cytinus vocatur Græcis . . . In hoc ipso cytino flosculi sunt, antequam scil. malum ipsum prodeat, erumpentes, quos Balaustium vocari diximus.” *Plin.* l. 23. c. 6. p. 599.

S E C T. II.

They are astringent, and used in fluxes and hæmorrhages, inwardly and outwardly, like tormentil or bistort. The dose in substance is $\mathfrak{z}\text{i}$. to $\mathfrak{z}\text{ij}$; in infusion or decoction to $\mathfrak{z}\mathfrak{ss}$.

“Flores, tam balaustia quam cytini, ejusdem sunt naturæ terrestris scil. validè adstringentis, inspissantis, refrigerantis, siccantis, unde et balaustiorum creberrimus usus esse solet in omnis generis fluxionibus. e.g. diarrhœa, dysenteria, uteri fluore et similibus, in sanguine vulnere cohibendo, in gingivarum laxitate emendanda, in hernia curanda, &c. Cortex (malicorium, psidium) ejusdem cum floribus censetur naturæ, præcipuique usus est in sedando fluxu hæmorrhoidum, narium, uteri, &c.” Vid. *Schrod.* 598.—For,

They are of a styptic taste, make ink with vitriol like galls, tan leather as well as oak-bark, and by every experiment are strongly astringent. Some make them diuretic, others anthelmintic, &c. Vide *f. B.*

B E T O N I C A.

S E C T. I.

Betonica, betonica vulgaris. *Offic.* Betonica purpurea. *B. P.* 255. *T.* 203. Betonica *Dod.* 40. *Clus.* *H.* ii. 39. *Ger.* 714. *R. H.* 550. *Syn.* 238. *B.* Vulgaris purpurea. *f. B.* iii. 301. *H. Ox.* iii. 365. *B.* vulgaris, flore purpureo, *Park.* 614. Betonica *H. Cliff.* 310. Common or wood betony.—It grows in woods, thickets, &c. flowering in July: The leaves and flowers are used. It is more common in our gardens than woods.

“Cestron, quod psychiatrophon vocatur, quoniam frigidissimis in locis reperiatur, Romani vetonicam (*βετονικην*, *al. εεπτονικην*) seu rosmarinum (*ρωςμαριν*) apellant: herba est caulem proferens tenuem, cubiti altitudine, aut etiam majorem, quadrangulum: folia longa, mollia, quernis similia, in ambitu incisuris divisa, boni odoris, ac prope radicem majora: semen in summitate caulium, thymbræ modo spicatum inest. Decerpta hujus folia siccari oportet; quippe quorum sit etiam major et frequentior usus. Radicis vero subsunt tenues seu ellebori: quæ quidem ex hydromelite potæ pituitosam vomitionem evocant.” *Diosc.* l. 4. c. 1. p. 245. Invenere herbas et universæ gentes. . . Vettones in Hispania eam, quæ vettonica dicitur in Gallia, in Italia, autem Serratula, a Græcis cestron aut psychotrophon, ante cunctas laudatiss.

“sima. Exit anguloso caule, cubitorm duum, a radice spargens folia fere Lathi ferrata, semine purpureo.” *Plin.* l. 25. c. 8. p. 637.

There is a libellus de betonica, attributed commonly to *Augustus's* physician, *Ant. Musa*; by some to *L. Apuleius*; of which there are said to be very ancient MSS. “In optimis bibliothecis quibusdam asservantur libelli hujus exemplaria manuscripta antiquissima... Septem et quadraginta morbis sanandis, ibi est efficax, una planta.” *Rieger Introd.* ii. 144. *J. B.* iii. 302. has more than a column from it; and thus he begins: “Herba betonica nascitur in pratis, et montibus mundis, et opacis, circa frutices. Animas hominum et corpora custodit, et nocturnas ambulationes a maleficiis et periculis. Loca sacra et busta a visib. metuendis tuetur et defendit: denique res omnino sancta est.” Vide *J. B.* or rather *S. Pauli Q. B.* p. 219. ad 222.

De hac singularem librum scripsit *A. Musa*, *Augusti* imperatoris medicus, unde in tanto pretio coepit esse, ut Italico proverbio diceretur *Vende la tonica è compra la vetonica*. Idem laudaturi aliquem plures dicunt habere virtutes quam vetonica. *Hoffman* 129.

S E C T. II.

It is a detergent deobstruent, and diuretic, and probably also cathartic; called cephalic, pectoral, hepatic, uterine: and is recommended internally in the head-ach, vertigo, palsy, the consumption, gout and gravel; and externally as an errhine, or rather ptarmic.

“Calfacit et siccit. 2. Acris est et amara, discutit, attenuat, aperit, extergit: imprimis cephalica est et epatica, splenetica, thoracica, uterina, necnon et vulneraria, et demum diuretica: hinc usu interno et externo creberrimo venit, maxime in morbis capitis. *Præp.* 1. Aqua ex foliis vel floribus. 2. Conserva ex floribus. 3. Syrupus ex succo. 4. Syr. compositus. 5. Emplastrum. 6. Sal ex incinerata planta.” *Schrod.* 547.

1. It is of an unpleasant bitterish taste, and somewhat aromatic smell. “Folia sapore aromatico prædita.” *J. B.* “The leaves have an herbaceous taste, a little saltish; they are a little aromatic, and do not redden the blue paper: the flowers redden it but very little, as also the root, which is considerably bitter.” *T. Hist.* p. 320. 2. Betony tea is of a greenish or herbaceous taste, a little bitterish rather than saltish: vitriol makes it dark, and greenish, but not turbid. It does not redden the blue paper; though it reddens a little the solutio heliotropii. 3. The powder, as well as green leaves, of betony provoke sneezing; and thus are said to purge the head: and externally applied, it is said to be anodyne and discutient, and to comfort the head and nerves. Some smoke it per se, or with tobacco, for diseases of the head. “Morsibus imponitur vetonica præcipue, cui vis tanta perhibetur, ut inclusæ circulo ejus serpentes, ipsæ sese interimant flagellando.” *Plin.* l. 25, c. 8. p. 639. Yea the smell of it is said to make people drunk and delirious. “Nonnulli vim anodynam et fere inebriantem in ea observaverunt. *Simon Pauli in Quad. Bot.* refert quasdam edentulas anus occupatas in eruenda et eradicanda betonica, eaque transplantanda in distantiore areolam, sole sub ardente cernu-

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“ as et conquiniscentes, a nimia betonicæ fragrantia temulentas factas fuisse, et miros, ridiculosque corporis gestus egisse. *Bartholinus in Historia Anatom. Observationum*, cent. 3. obs. 97. “ Recenset quod cum hortulani operarii hero suo evellere voluissent betonicam, pro usu medico, omnes velut temulenti et ebrii titubarent. Quæquidem vis oritur a betonicæ recentis et vegetæ subtili sulphureo spiritu cerebrum et nervos feriente.” *Geoff.* iii. 185. I am afraid the hot sun, or liquor, was more to blame than the betony, which I have often eradicated and transplanted, without being sensible of its nimia fragrantia, or intoxicating quality: and have seen many keep a leaf of it long in their nose, but never knew it do any prejudice. 4. Since not only the antients but so the moderns make the root emetic; and *Dioscorides* says the herb is purgative; and since the recent herb is to me nauseous, and has rather a rank, than an agreeable aromatic flavour, I think it more than probable that taken in a sufficient quantity it is cathartic.—“ *Herba... Urinas ciet, alvumque subducit. . . Drachmis vero iv. bibita in aquæ mulsæ cyathis x. alvum purgat.*” *Dioscor.* l. c. Radices multum stomacho oriquæ ingratae, nauseam, rugitus. Vomitusque cient. Folia è contra odora aromatica, et grato sapore, nonnihil roborante, cibo et medicamento naturæ amica.” *J. B.* Hence it is an efficacious dissolving, as well as stimulating medicine. Yet, 5. It is too much commended by many, and not well understood; as well as unjustly excluded the *M. M.* by others. It is made a remedy for the gout, head-ach, and nervous diseases. *R. H.* For the sciatica, jaundice, palsy, internal ulcers, stuffing of the lungs, obstructions of urine, bites of mad dogs, &c. *T. H.* and *J. B.* to say nothing of the extravagant praises given it by the antients. “ Betonica discutit, attenuat, aperit, et abstergit. Imprimis cephalica est, hepatica, splenetica, thoracica, uterina, diuretica, antiarthritica, et vulneraria.” *Geoff.* iii. 185, &c.

Analysi chymica foliorum betonicæ lb̄ v. præbuerunt humoris lb̄ iv. ℥iv. 3v. gr. xlviij. (all more or less acid) olei 3x. carbonis ℥v. 3iij. gr. xviii. undecinerum 3ij. 3v. gr. xxx. et inde salis fixi alcali 3iv. gr. xlviij. (ergo terræ 3ij. gr. liv.) jactura fuit 3iv. 3v. gr. vi.” *Secundum Geoff.* iii. 184. who adds, “ Flores multum plus olei præbent.”

S E C T. III.

The dose may be to 3i. or 3ij. in substance; to 3℥. in infusion. *Conserva florum betonicæ*, & *emplastrum de betonica*, were left out of our dispensatory only in 1744. The leaves are used in the *pulvis cephalicus*: and the *aqua pæoniæ composita* has the summities.

“ Foliorum vel recentium vel exsiccatorum M. i. in aqua bulliente maceratur theæ ad instar, aut in lb̄i. decoquitur. Flores a nonnullis ad hunc usum anteponuntur. Syrupus vel conditum ab 3℥. ad 3i. foliorum succus ad 3iv.; vel extractum ad 3℥. prescribuntur, et iisdem virtutibus instruuntur. In hæmicrania, vertigine, membrorum stupore et paralyfi, hæc omnia usurpantur. Expectorationem promovent, et ulcera interna detergunt, et ad cicatricem perducunt.” *Geoff.* iii. 185. These doses are strangely proportioned. Are the dried and green leaves of the same strength, in the same quantity, with the extract, or with one another? Is syr. 3i. as good as succi 3iv. ? and

so on. For if man. i. foliorum be a dose, succi ℥i. and extracti ℥i. are too much; and syr. ℥i. too little. But here is no danger. "Ex omnibus (plantarum succis expressis) quos expertus sum, betonicæ vulgaris dilutissimus est, et minime coloratus." *D. Sam. Fisher. R. H.*

B O R R A G O.

S E C T. I.

Borrage, offic. Buglossum, latifolium, *Borrage. B. P.* 256. *Borrage floribus cæruleis. J. B.* iii. 574. *T.* 133. *R. H.* 493. *Borrage. Park. par.* 249. *Borrage. Dod.* 627. *Borrage hortensis. Ger.* 797. *H. Ox.* iii. 437. *Borrage hortensis. Ger. R. Syn.* 228. *Borrage, calycibus patentibus. H. Cliff.* 44. *Borrage.*—Which sown in the gardens flourishes very plentifully; and flowers all the summer. Is it a native? "In hortis, viis et muris frequens." *R. Syn.* "It grows in gardens, but is found wild in divers places near houses, and upon walls; and flowers in June." *Miller Bot.* p. 90. "Borrage and bugloss grow only in gardens with us." *Park. Par.* 250. It is not indigenous in Scotland: I think, at least *Sutherland* does not mark it as such. "Nos cum plurimis aliis feminibus, ex Aleppo recipimus." *H. Ox.*—"The radix, herba, flores, are used in the shops, according to *Scrod.* 549. and *Dale* 136. The leaves and flowers are used by *Miller*. Flores only are mentioned in *Pb. Edin-burghensis*.

This is the buglossum of the ancients, according to *Matthiolum*, *Cordus*, *Dodæus*, &c. Vide *B. P.* "Buglossum nascitur in campestribus et sabulosis. Julio mense colligitur. Aiunt eam quæ tres thyrsos omittit, cum semine et radice tritam potamque, contra tertianos horrores prodesse: quæ quatuor ad quartanos: ea in vino decoquitur. Herbam abscessibus utilem esse aiunt. Verbasco simile est, folium in terra sparsum, nigrius asperum, bubulas imitans linguas. Quod in vinum dejectum animi voluptates auget." *Dioscorides Matthioli* p. 824: all which to verbasco is taken from the *Nictba Dioscoridis*, or is spurious. Vide *Saracen.* p. 471. "Buglossum verbasco simile est, folio in terra sparso, verum aspero, nigriore, minoreque bubulæ linguæ simile: quo vino inditum animi voluptatis augere, hilaritatemque afferre creditur; εὐφροσύνην δόκει εἶναι. *Dioscor.* l. 4. c. 128. It is *Avicenna's* buglossum. *Can.* l. 11. and what the *Lucani* call corago. Vide *Matth.* l. c. "*Plutarchus Sympos.* lib. 1. quest. 1. Buglossum fuisse eam plantam (nepenthes *Homeri*) talemque a veteribus habitam innuit, licet illud ἀλλήγορικώς, paulo post interpretatur: in quam quoque sententiam ivit *Macrobius Saturnal.* l. 7. c. 1. "Sed *Cælius Rhodiginus*, et *Joannes Spondanus* minime allegoriam fuisse probant, sed verum pharmacum, ac ipsum quidem, ut probabile videtur, buglossum." Thus *Renatus Moreau in Schol. Salern.* p. 333. And in the *Schola Salernitana*, c. 21.

"Vinum potatum quo fit macerata buglossa,

"Mærorem cerebri dicunt auferre periti,

"Fertur convivas decoctio reddere lætos." *Ib.* p. 330.

Quatuor flores cordiales sunt flores borraginis, buglossi, rosarum et violarum. Of the two last I shall speak afterwards: but the first two cannot be separated.

Buglossum, buglossa, *offic.* Buglossum angustifolium, majus. *B. P.* 256. Flore cæruleo. *T.* 134. *B.* Vulgare ac majus. *J. B.* iii. 578. Buglossum. *Park. Par.* 249. *B.* Vulgare, *Park. R. H.* 493. *B.* perenne, majus sativum. *H. Ox.* iii. 438. Buglossa vulgaris. *Ger.* 798. Anchusa Alcibiadion. *Dod.* 629. Anchusa, foliis lanceolatis, spicis imbricatis, secundis. *H. Cliff.* 46. Great garden bugloss.

It grows in Germany, France, Sicily, &c. In gardens it flowers in June and July. The roots, flowers and leaves, are *officinal* in *Ph. Edin.* as well as in *Schroder*, &c. “*Officinalis est sine discrimine, sive cæruleos ferat flores, sive albos, quæ hic æque vulgares.*” *Schroder.*

S E C T. II.

They are diluent and antacid detergents. And so are cooling, deobstruent, and diuretic. They are called cordial; and recommended in lowness of spirits, lipothymies, melancholy, malignant fevers, &c. The leaves are as good as the flowers.—Bugloss root is more antacid, because more viscous, than the other parts. In ardent fevers, hard coughs, and heat of urine, and the like, they may do service.

“*Borrago cordialis est e præcipuis, calfacit et humectat, 1. Atram et adustam bilem corrigit; spiritus vitales, et animales, fuligine atrabiliaria inquinatos, mundificat, unde et omnibus affectibus, ex atra bile oriundis convenit, v. g. hypochondriacis. Præp. 1. Aqua duplex; ex toto, et ex floribus. 2. Conserva; ex floribus. 3. Syrupus. 4. Succus inspissatus, sive essentia. Schrod, p. 548. “Buglossum vires easdem obtinet quas borrago. Præparata eadem quæ borraginis.” Schrod. p. 550.*—I observe,

1. They are insipid to the taste, and have no proper smell; but abound with a viscid, or glutinous juice; especially the roots. “*Borraginis radix mansuviscida. Buglossi radix est gustu lento.*” *J. B.* “The roots of bugloss are very glutinous, and redden much the blue paper; the flowers redden it but little; and the leaves almost not at all.” *T. Hist.* p. 251. “*Borrago tota continet succum viscosum, saporis fatui.*” *Nucl. Belg.* 46. Do not acids turn the flowers red, as easily as the blue paper?—2. Any part of them, that is the root, leaves, and flowers, yea and stalks too, before they grow woody, may be, and are by some eaten like other pot-herbs and roots.—3. “*Borrago exsiccata, et super prunas projecta, comburendo, plurimas edit fulgurationes nitri ad instar, et revera salem essentialem continet nitroso-ammoniacaalem, qualis ex mistura spiritus nitri et spiritus urinæ exurgeret.*” *Cætera Vide in Geoff.* iii. p. 202. Hence—4. Though they are cold cordials, yet they may be of use in many diseases where bilious, putrid, or saline acrimony in the fluids, or rigidity of the fibres offend; and so may be numbered among the olera emollientia, aperientia, deterfiva ad ulcera interna, et antinephritica vegetabilia: also among pectorals, laxatives, &c. “*Galenus in tussi ab asperitate gulæ usurpat. . . Folia in cibo alvum molliunt.*” *Hoffman* p. 136. Sect. 4.

“ Audivi hypochondriacos dicentes se valde adjutos, ab esu florum borraginis in acetario.” *Ibidem*. “ In suppressione mensium nonnullis arcanum est conserva borraginis, in vino albo tenui soluta.” *J. Mart. Observ.* 50. “ *R. H.*”

“ Analyti chymica, ex totius borraginis recentis cum radicibus lbv. prodierunt humoris lbiv. 3x. 3v. gr. iij. (in all which there is little acid) salis volatilis gr. xi. olei 3v. gr. iii. Carbonis 3ij. 3ij. gr. lx. unde cinerum 3x. gr. li. ac inde salis fixi alcali 3v. gr. xxiv. (ergo terræ 3v. gr. xxvii.) et jactura fuit 3i. 3x. gr. lxvii.” *Secundum Geoff.* iii. 202.

“ Ex buglossi foliorum recentium lbv. prodierunt humoris lbiv. 3x. 3ij. gr. lxxi. salis volatil gr. lx. olei 3vij. gr. lxii. Carbonis 3ij. unde cinerum 3i. 3vij. gr. lxvi. et inde salis fixi alcali 3vi. gr. xlii. (ergo terræ 3ix. gr. xxiv.) ac jactura fuit 3xii. gr. xxiii.” *Secundum Geoff.* iii. 227. “ Buglossi folia exsiccata et prunis imposita accenduntur, et leves emittunt fulgurationes, quales sale nitri in prunas projecto exurgere solent. Ex quibus concludere licet, salem huic plantæ inesse essentialem nitroso-ammoniacalem.” *Geoff.* l. c. Who says, and justly, easdem vires obtinet quas borrago : and commends them both in affectionibus melancholicis et hypochondriacis, in febribus inflammatoriis, pleuritide, peripneumonia, cordis palpitatione, cachexia, &c. Yet by the analyses, there appears to be a considerable difference in the proportions of the principles they yield. It is also observable that they contain very little acid, and are rather alkaline, than ascescent ; and so appear to be saponaceous and emollient : and to have the virtues of althæa and parietaria conjoined.

“ *Joan. Henrici Hottengeri, M. Tigurini, De Borraginis noxa Observatio.* Extat in *Misc. Acad. Nat. Cur.* Dec. 3. an. 9. and 10. *Obs.* 224.” *Seguierii.* B. B. p. 266.

Do the leaves flash like nitre in the fire ?

S E C T. III.

They may be eaten by pounds, like cabbage, any way. The conserve is unknown here. They are but little used any where ; and are excluded the *London M. M.*

“ Florum . . . pug. i. aut alter in liquoris idonei cyatho uno infusus instar theæ, præscribitur, aut eorum conserva a 3ij. ad 3ß. Folia et radices in decoctis bechicis, in jusculis alterantibus et refrigerantibus usurpantur. Succus expressus et defoecatus, ad 3iv. vel vi. pro dosi sumitur in pleuritide, et tertiana vel quarta quaque hora iteratur. Sæpe sudorem movet, sanguinem spissum et fere coagulatum resolvendo.” *Geoff.* iii. 228.

B U R S A P A S T O R I S.

S E C T. I.

Bursa pastoris. *offic.* Bursa pastoris major ; folio sinuato. *B. P.* 108. *T.* 216. Bursa pastoria. *Drd.* 103. *J. B.* ii. 936. *B. pastoris.* *Lob.* 110. *Adv.* 76. *Ger.* 276. *B.*

276. *B. Pastoris major, vulgaris.* *Park.* 866. *B. Pastoris major, capsula cordata; foliis sinuatis, H. Ox.* ii. 304. *Thlaspi fatuum; bursa pastoris dictum. R. H.* 838. *Syn.* (edit. 2.) p. 176. *Bursa pastoria, J. B. R. Syn.* (edit. 3.) 306. *Thlaspi, siliquis verticaliter cordatis, Lin. Fl. Lap.* 209. *H. Cliff.* 330. Shepherd's purse.

It is common every where almost by the way sides, &c. flowering and seeding all summer. "Thlaspi species apud antiquos fuit, quæ nunc bursa pastoris, a marsupiolis compressis (aliis capsella) dicitur: quibusdam sanguinaria et "crispula." *B. P.* The herb is used.

S E C T. II.

It is antacid, detergent, and diuretic; said to be astringent; and is recommended in fluxes and hæmorrhages; but differs not from the erysimum in virtues.

"Refrigerat, siccatur, astringit, et constipat; hinc valet in hæmorrhagia narium, expuitione sanguinis, diarrhœa, dysenteria, mictione cruenta, fluore nimio mulierum. Externe vulneribus solidandis, a plebeis adhiberi solet, nec sine successu: uti et hæmorrhagiis narium (sub aliis et in nucha). Quinimo adhibetur sæpius in cataplasmatis febrifugis, quæ carpis imponuntur.—*Præpar.* aqua ex foliis." *Schrod.* 550.

1. The leaves are almost insipid, but the flowering tops are hot and biting to the taste, "It is of an herbaceous taste, a little saltish, and as it were deterfive. The juice of the leaves reddens a little the blue paper. . . It does not yield much acid by a chemical analysis; all drawn from it is almost alkaline: there are few plants which yield more volatile salt, more fixed lixivial salt, and more earth. . . By the consent of all authors it is vulnerary and astringent, &c." Vide *T. Hist.* p. 11. But neither juice nor infusion redden the blue paper; nor turn purple or black with vitriol; nor is its fixed salt an alkali.—2. *B. pastoris siccaturæ cum toto, ʒiij. ʒvi.* well calcined gave cinerum ʒiij. gr. liß, the lixivium whereof made no ebullition with acid sp. vitrioli, nor sp. acetii. Neither did its fixed salt, of which it yielded gr. xiiß. the distinct crystals whereof, were beautifully pellucid slender prisms of six unequal sides and angles; which thrown on a live coal, cracked, split, and flew-off like sea-salt.—3. It easily putrifies, and by long drying loses all its acrimony; as all the tribe do, to which it belongs.—4. Almost every author makes it cooling as well as astringent: only *Lobel* and *Pena* I think differ from the multitude. "Bursa pastoris . . . ubivis notissima . . . foliis et facie Irionis aut erucae floribus albicantibus, thlaspi non dissimilibus, tametsi gustu non perinde acri, sed exsiccante potius quam refrigerante. Nam qui, quia sanguinem sistit (sistit autem strenue) frigidam faciunt, infelici argumento nituntur, etenim umbellæ, floresque gustanti, aliquid acrimoniæ inurunt, indicioque sunt siccando colligendoque sistere, ut porri succus, vitriolum, urtica, non refrigerando." *Adv.* p. 76. Probably its astringency has been owing to some mistake. "Guido nimis licentiose Galeni locum interpretans, ait polygonum esse virgam vel burfam pastoris. Polygonum et bursa pastoris multum differunt." *J. B.* I have not found this in *Guido de Cauliaco's Chirurgia*, among the medicinas frigidas

frigidas repressivas, he has virga and bursa pastoris. *Traet.* 7. c. 5. p. 390 & c. 8. p. 413. "Bursa pastoris, says he, herba est frigida et sicca cum strictione." But of this formerly.—See the Introduction.

Analysis chymica bursæ pastoris floridæ lbv. præbuerunt humoris odoris et saporis quasi sulphurei et alcalini lbijß. 3ij. gr. xxxviii. humoris primo obscure falsi et urinosi, ac tandem intense alcali, urinosi et obscure acidi 3xii. 3vi. gr. xii. humoris sale volatili urinoso copioso impregnati 3iß. gr. xlviii. carbonis 3v. 3ij. gr. lx. qui calcinatus reliquit cinerum 3iij. 3i. gr. vi. unde salis fixi mere alcali 3vi. gr. iv. (ergo terræ 3ij. 3iij. gr. ii.) partium jactura in distillatione fuit 3i. 3v. gr. xxvi. Secundum *Geoff.* iii. p. 233. He adds, "Herba integra saporis rem herbaceum, subsalsum, nonnihil adstringentem, aliquantisper glutinosum. Succus foliorum chartam cœruleam, rubro colore tingit... Salem igitur ammoniacalem continet, cum aluminosi portione." Compare him with *T.* l. c. It must be astringent, and therefore must have an astringent taste, and aluminous salt, in spite of fact. Hence he commends it "in hæmorrhagiis quibuscunque; in diarrhœis, dysenteriiis, alvi profluviiis, et gonorrhœa. In mictu cruento, says he, specifica habetur. Ipsi quoque febrifuga virtus tribuitur." And outwardly in hæmorrhages. "Imprimis planta contusa, et naribus indita, vel in nucha, vel sub axillis utrisque applicata, vel in ea manu detenta, ex quo latere nares sanguinem fundunt, narium hæmorrhagias sistit... Tota planta a quibusdam in ictero commendatur, calcis indita et nudis pedibus admota." Vide p. 233, &c. he says, "In aqua vel vino rubro ad m. i. vel succus defæcatus ad 3iv. vel 3vi. vel foliorum pulv. 3i præscribuntur, et in jusculis, apozematibus, et clysteribus recipiuntur." Its juice is one of the useless ingredients of our emplastrum defensivum.

L E C T U R E L I V.

C A L A M I N T H A.

S E C T. I.

Calamintha. Calamintha montana. Calamintha vulgaris. *Offic.* Calamintha vulgari, ; vel officinarum *Germaniæ.* *B. P.* 228. *T.* 194. Calamintha, flore magno, vulgaris. *J. B.* iii. 228. *C. montana.* *Dod.* 98. *C. montana vulgaris.* *H. Ox.* iii. 413. *C. vulgaris officinarum,* *Ger.* 687. *C. vulgaris.* *Park.* 36. *R. H.* 569. *Syn.* 243. Melissa, floribus ex alis superioribus, pedunculo communi, confertis. *H. Cliff.* 307. Common calamint.

In our gardens it seldom lives above three years, flowering in June and July, and plentifully sowing itself. It grows in England, "In viis publicis, et ad aggeres sepium et fossarum, sed rarius." *R. Syn.* The leaves and tops are used: and as a succedaneum, calamintha pulegii odore, sive nepeta. *B. P.* 228. *Cal. odore pulegii.* *Ger.* 687. *R. H.* 569, *Syn.* 243. Melissa, floribus ex alis superioribus, pedunculo dichotomo, caule procumbente. *H. Cliff.* 308. Field calamint. Which is the calamintha *Pharm. Londinensis*, non magno errore

rore, though the former is generally preferred. The old *Lond. Pb.* had also calamintha palustris, i. e. Calamintha arvensis verticillata *B. P.* 229. Mentha arvensis, verticillata hirsuta. *J. B.* iii. 217. Mentha floribus verticillatis, foliis ovatis, acutis, ferratis. *H. Cliff.* 307. and thus there may be as many calaminthæ as are mentioned by Dioscorides. But that they are the same I cannot say. “*Καλαμινθη*, quasi bona et utilis mentha, nidore omni suo, ut habet “*Aristophanes*, serpentes, vel accensa vel substrata, ait *Dioscorides*, fugare “*folet.*” *B. P.*

“Ex calaminthæ generibus quædam montibus familiaris, folia habet ocimi, “incana, furculos et caules angulosos, ac florem purpureum. Altera pulegio similis est, sed major, quam sylvestre pulegium ideo vocarunt, quod et odore “ipsum æmuletur: hanc Latini nepetam vocitant. Tertia menthasto cognata est, foliis oblongioribus, caule et ramis, quam superiora genera majoribus, “sed viribus inefficacior. Omnium folia gustu impense ferventia et acria radix superba. Nascitur in campestribus locis, asperis et præhumidis.” *Dioscorides* l. 3. c. 43. p. 190.

S E C T. II.

It is an acrid stimulating aromatic; or attenuating diaphoretic, diuretic, and antiseptic; called stomachic and uterine: internally it is recommended in phlegmatic and flatulent diseases of the stomach and guts; obstructis mensibus and other such female diseases; and externally, as discutient and anodyne, in inflammations uteri, &c.

“Calfacit et siccat, aperit, attenuat, discutit, extergit, partium tenuium est, “stomachica ac uterina imprimis; hinc et pectoralis atque epatica: menses ciet, foetum ejicit, urinam movet, tussi medetur, epar resserat. *Præp.* 1. Aqua “ex planta integra. 2. Sal ex cinere. 3. Syrupus compositus. 4. Species “diacalaminth.” *Schrod.* p. 552.

1. It is of a warm, penetrating, aromatic taste, and fragrant smell, somewhat like pulegium. “Odoris est aromatici, ad mentham accedentis, saporis “caladi, acris.” *Nucl. Belg.* p. 53. “Saporis acris, odoris grati.” *Geoff.* iii. 239. “The leaves and flowers have a pleasant aromatic smell, somewhat like “wild mint.” *Miller Bot.* 101. — 2. Summitum thea is of a subacrid, subaromatic, and not disagreeable taste, and smells a little of the herb: it only dilutes syr. violarum; reddens very little a sol. *Heliotropii*; and turns a sol. *vitrioli* turbid and of a greenish black, the mixture soon precipitating. — 3. Externally it has much the same effects with other aromatics; and in many things agrees with the mints. “Externe pubi ad inflammationem uteri, ut et capiti “ad vertiginem, et ventriculo ad vomitum applicatur.” *Herman Cynos.* p. 471. “This plant is full of a sal volatile oleosum aromaticum.” *T. Hist.* 405. “Calaminthæ species (of which he has the above three, and *C. magno flore.* “*B. P.*) salii essentiali ammoniacali donantur, cum oleo aromatico copioso “conjuncto.” *Geoff.* iii. 240. No analysis is given of either: neither is the dose. Only the last author says, among other things, “ulcera renum deter- “gunt; et pulmonibus exulceratis auxiliantur, ex infuso theæ modo assumptæ.”

S E C T. III.

It may be given in powder to ʒi. and more if not too bulky: in infusion to ʒβ. It is used in the theriaca; and was in the syr. de artemisia.

C A L T H A.

S E C T. I.

Caltha, calendula. Offic. *Caltha vulgaris*, *B. P.* 275. *T.* 498. *Caltha flore simplici.* *J. B.* iii. 101. *H. Ox.* iii. 13. *Calendula. Dod.* 254. *Calendula, flore simplici. Ger.* 139. *C. simplex, Park. Par.* 296. *C. fativa. R. H.* 337. *Calendula, feminibus radii cymbiformibus, echinatis; disci bicornibus. H. Cliff.* 425. Common garden marigold.

It grows in France, Italy, &c. in gardens; and flowers almost all the summer and autumn. It varies much in the colour. “*Caltha Græce καλχα, ficulis καλθα, unde corruptione calthula, caldula, caledula, calendula. (E Vossio.) Vide R. H. “Calendula, quod singulis fere mensium calendis “floreat, eaque de causa. Fior d’ogni mense ab Italis vocatur.” H. Ox.*

“Tum casia, atque aliis intexens suavibus herbis,
“Mollia luteolâ pingit vaccinia calthâ.”

Virgil Eclog. 2. ver. 48. Vide Bod. in Theophr.

“*Caltham poetarum hanc esse volunt, quam aliqui, ab aureo colore floris, “chrysanthemum nominant, et quidem Dioscoridis l. 4. c. 58. At Columna “Phyt. (52.) clymenum Dioscoridis l. 4. c. 13. censet. Alii ad caltham Plinii “l. xxi. c. 6. Alii ad gomphœnam ejusdem l. 26. c. 7. referunt. Dalecham- “pius a cereo ipsius flore, Cerinthen putat.” B. P. The flowers only are used; though the leaves are as medicinal, as also the flower cups, or herba florens.*

S E C T. II.

It is detergent, deobstruent, diaphoretic, and diuretic; called cordial and alexipharmic; and commended in obstructions of the viscera, green sickness, jaundice, scrophulæ, measles, small-pox, malignant fevers, pestilence, &c.

“Flores cardiaci censentur, hinc epatici. Calfaciunt et siccant 2. aperiunt, discutunt, subastringunt; menses cient, partum promovent (fumus subditus parturienti) sudores movent, alexipharmaci censentur, ictero medentur. *Præp.* 1. Aqua, ex foliis et floribus, cum incipit florescere. 2. Acetum. 3. Con-
“serva, ex floribus.” *Schrod. p. 553.*—Observe

1. The petala or semisflosculi, and flosculi, are at first sweetish to the taste, then bitter and nauseous; the folia and calyces want the sweetness, but are more bitter, disagreeable, and acrid a little, making a lasting impression on the

tongue, (continuing an hour or so.) All the herb is of a strong and somewhat resinous, or rather bituminous, smell; and clammy to the touch. "Tota planta tactu viscida est." *Col. Phyt.* 58. "Flores odorati, folia gustu herbaceo, mox calidiusculo... *Dodonæus* credit cor corroborare florem; folia autem calidiora esse, acrimoniam enim fervidam quandam habere, ratione cujus in olere sumpta, alvum movere et lenire." *J. B. l. c.* "Tota planta est tactu valde pinguis, saporis subamari, et odoris subaromatici, grati." *Nucl. Belg.* 54. "The leaves are fœtid, bitter, and redden a little the blue paper: burnt at a candle they denote somewhat like nitre." *T. Hist.* p. 182. "Folia, gustu herbaceo, mox calidiusculo, odore gravi; flores cum gravitate quadam, aliquantulum odorati." *Geoff.* iii. 243. "Salem essentialem continet nitroso-ammoniacalem." *Ibid.* p. 244. — 2. Herbæ floridæ thea is of a very bitter and disagreeable taste, lasting an hour: it only dilutes syr. violarum, and fol. heliotropii: but a solution of vitriol turns it opaque, and to a greenish-black colour, which slowly and sparingly precipitates. Florum thea is also bitter and disagreeable, with little smell, of the colour of old brandy. Ol. tartari makes it much deeper and staining, but not urinous or fœtid: it gives a pale red to the solutio heliotropii; and precipitates more plentifully a solution of vitriol, than the former; in other respects they agree. Hence it is (subastringent and) saponaceous, as well as stimulating; and probably also cathartic. *Columna* says it loses its taste and smell by drying. An recte? But, 3. Pulvis foliorum is commended by *Casalpinus* for the tooth-ach; aqua stillat. for sore eyes, by *Tragus*; the leaves for callous ulcers, and corns at *Paris*. *T. Hist.* p. 183. And, 4. It is much used as a cordial and alexipharmic; also as uterine. Not only the acetum calthinum, but also the juice and substance of the flowers, have been in great esteem for the pestilence; both as a preservative and cure. A marigold-posset is much used to promote the eruption of the small pox; "ejusque usus a longo tempore, fere inter omnes increbuit." *R. H.* "In metu carbunculi pestiferi detur succus calendulæ mane, ab ʒi. ad ʒij. mirabiliter etiam purgat venenum pestiferum, per sudorem illud miræ virtute evocans." Ex obs. *Marcelli Cumani*, *R. H.* "All the preparations of marigold are excellent for the jaundice, palsy, dropsy, small-pox, malignant fevers and green-sickness. Children that are scrophulous are made to eat the leaves and flowers in sallads." *T. H.* p. 183. "In scrophulis flores et folia cruda vel cocta comesta, et decoctum pro potu solito commendantur." *Geoff.* iii. 244.

"Sanguis menstruus muliercularum, præcipue benevalentium, odorem florum calendulæ spirat. Hinc conjicio, similitudine quadam substantiæ, calendulam movere menses." *River. Obs. communicat. Petro Paschequo Obs.* 30. p. 557. Analyti chimica, ex calendula multum extrahitur olei et humoris acidi, parum vero salis volatilis, et spiritus urinosi." *Geoff.* iii. 244. I fear it is an imagined analysis. *Herman* guesses better when he conjoins the flores calendulæ et cheiri; as flores sale fixo, cum paucis volatilibus constantes. *Cynos.* p. 599. though probably they contain more volatile parts than he imagines. "Flores odorem spirant aromaticum, si manduntur, acrimoniam penetrantem exerunt, et fere exurentem; hinc virtutes eorum sudoriferæ summæ, vix cedentes croco." *Riegeri Introd.* Vol. II. p. 379.

S E C T. III.

It may be given in powder to ʒi. or ʒij. in infusion to ʒβ. The juice to ʒi. We keep no preparation of it. It is banished the London *M. M.*

“ The juice is given ab ʒi. ad ʒiv. The infusion of the leaves and flowers in white wine is taken from ʒij. to ʒvi. the extract and conserve from ʒi. to ʒij.” *T. Hist.* l. c. “ Succus totius plantæ ab ʒi. and ʒiv. propinatur. Infusum florum et foliorum contusorum in vino albo, ab ʒij. ad ʒvi. ; extractum a ʒi. ad ʒij. ; conditum a ʒij. ad ʒi. præscribuntur.” *Geoff.* iii. 244. Would an ounce or two of the juice purge ? “ Conserva florum calendulæ a nonnullis tanquam specificum vertiginis maxime commendatur. *River. Prax.* l. i. c. 9. p. 181.

CAPPARIS. *Vide* Roots.

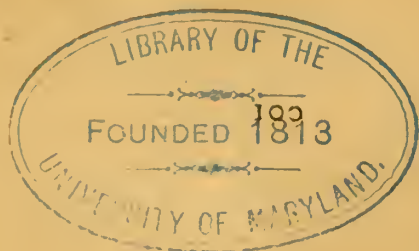
C A R D U U S.

S E C T. I.

Carduus, carduus benedictus. *Offic.* Cnicus sylvestris hirsutior ; sive carduus benedictus. *B. P.* 378. *T.* 450. Carduus benedictus. *Dod.* 737. *J. B.* iii. 75. 2. *Ger.* 1171. *Park. Par.* 530. *R. H.* 303. Carduus, luteus, procumbens sudoriferus et amarus. *H. Ox.* iii. 160. Cnicus, caule diffuso, foliis dentato-sinuatis. *H. Cliff.* 394. Carduus, or the blessed-thistle.

It grows wild in Lemnos, Chio, &c. is annually sown in gardens, and flowers in June. Quia a nostris vulgo carduus benedictus appellatur, sponte in agris “ (Lemni insulæ) nascitur, nec aliqua cultura indiget : Græci nomine corrupto, gaidieracantha, hoc est asininam spinam nuncupant.” *Bellon.* l. i. c. 25. p. 31. “ Nascitur etiam in arduis alpinis Gallo-provinciæ.” *R. H. e Lob. Adv.* p. 373. “ Ab immensis viribus quas habere creditur, et hoc nomen accepit, et sancti : imo ad Fridericum III. Imp. (who died an. 1493.) ex India missus fertur. (But *Arnoldus de villa nova* qui obiit 1363. used it.) Quod ut non nego : ita compertum fuit postea, in Europa etiam spontaneum esse. Locum ostendit *Pena.*” *Hoffman.* p. 145. The herb and seeds are generally used ; though the folia only are named in the *Pharmacop. Lond. Ed. noviss.*

“ Carduus α καρῶ, tondeo ; vel ab antiquo verbo caro, quod aptus esset carendæ, i. e. carminandæ lanæ κνικος, aut κμηκος, ἀπο τῆς κνιζειν, quod morere aut pungere significat i vel ἀπο τῆς κνιςμυς, pruritu : an potius a floris colore, cum κνικος exponatur croceus, rutilus.” *B. P.* It is not the κνικος *Dioscoridis* l. 4. c. 190. p. 320 ; and whether any of the cnici of *Theophrastus*, is uncertain. It is the “ Cnicus sylvestris alter *Theophrasti*, *Cord. in Dioscor.*” *B. P.* And cnicus sylvestris alter et hirsutior *Theophrasti* according to *Hoffman.* l. c.



S E C T II.

It is an antiseptic, stimulating diaphoretic bitter, said to be alexipharmic : and is recommended internally in intermitting and malignant fevers, headachs, dropries, worms ; and outwardly for gangrenes, ulcers, &c. Cum serpentaria virginiana convenit.

“ Herba cardiaca, alexipharmaca, ac sudorifera est exusitatissimis : calfacit et ficit 2. Attenuat, aperit, discutit, veneno et putredini resistit ; febres etiam inveteratas, et quartanas curat. Laudatur a nonnullis peculiariter in cephalæa clavo dicta, ut et in surditate. Extrinsecus rarioris est usus, adhibetur tamen nonnunquam ad gangrænam arcendam in (epithem : et cataplas :) Semen vires easdem obtinet, sed usu non æque crebro adhibetur : commendatur imprimis ad epar obstructum. *Præp.* 1. Pulvis. Datur ad ʒi. 2. Aqua, ex herba integra. 3. Spiritus, ex herba fermentata. 4. Succus expressus. 5. Sal, ex cinere. 6. Oleum stillatitium. 7. Conserva. 8. Syrupus, ex succo. 9. Extractum, ex foliis cum aceto distillato.” *Schrod.* p. 556.

The herb is of a very bitter and disagreeable taste, and resinous smell : the root is insipid. “ Insigni amarore tota planta est prædita.” *J. B.* “ Tota planta amarore insigni prædita est, radice excepta quæ nobis gustantibus vix leviter amaricare videbatur.” *R. H.* It loses little by drying ; and is infested by no insect that I have observed.—2. It is much commended for gangrenes, foul ulcers, and even for cancers, outwardly. I wish these virtues were confirmed by experience. “ Folia tusa et imposita scorpionum et serpentum ictibus medentur. Adversus cancrum, aliaque maligna et putrida ulcera, vix aliud cardui benedicti foliis, succo, decocto aut aqua destillata est præstantius remedium ; testantur nonnulli, mulierum quandam, cujus mammæ cancro ad costas usque absumptæ fuerant, aqua destillatâ, et pulvere foliorum insperso, mundatam et sanatam fuisse . . . Florum autem pappi vulneribus impositi ea sine dolore sanant : ex foliis cum multo cataplasma, tumores mox discutit pudendorum. Testatur *Arnoldus de villa nova* (c. 44. practicæ) vidisse se quendam, cui ex putridis et cavis ulceribus erosa fuerit ad ossa usque caro omnis tibiæ, quique bona omnia in curationem frustra expenderit, hac tandem ratione sanatum. Recentia c. benedicti folia contusa, cum vino generoso discoquebat, additaque postea liquefacta porci axungia, ebullire sinebat, tandem injecte farina triticea, continuo spatulo agitabat, quoad omnia in emplastri consistentiam coalescerent, quod calidum bis quotidie ulceribus imponebat.” *J. B.* iii. 79.—3. Inwardly a strong infusion or decoction of it, is emetic : being more nauseously bitter, though not so intensely bitter as wormwood : hence it is, ut serpentaria, more diaphoretic than stomachic. It is commended also for vertigoes, deafness, rheums, epilepsy, palpitation cordis, sciatica, scurvy, colics, poisons, pestilence, &c. Vide *J. B.* “ Pleuriticis opitulatur statim initio, una aut altera præmissa V. S. . . . conducit quod ad sanguinem grumosum dissolvendum, præsertim in casu ablato . . . semen in emulsionibus cum aqua papav. rhæados paratis, adversus pleuritidem, et rheumatismum sæpe felici cum successu usurpatur. Sudorem enim copiose prolicit. Eadem emulsio in variolis et morbillis, aliisque morbis mali

“ mali moris utiliter prescribitur: exanthematum enim eruptionem faciliorem efficit et feliciorem. *Geoff.* iii. 259. *Delirant medici; plectuntur . . . &c.* —

“ *Analyfi chymica, ex foliorum et summitatum card. bened. lbv. prodierunt*
 “ *humoris (odoris et saporis herbacei, obscure falsi, obscure acidi lbiv. humoris*
 “ *subacidi, deinde austeri lbij. ℥xiv. gr. lvii. humoris sale vol. urinoso copioso*
 “ *impregnati ℥vijs.) lbiv. ℥vii. gr. xxi. salis vol. urin. gr. xv. olei ℥vii. gr.*
 “ *xii. Carbonis ℥iv. gr. xlvi. unde cinerum ℥ij. et inde salis fixi alcali ℥v. gr.*
 “ *xv. (ergo terræ ℥x. gr. lvii.) Jactura fuit ℥ij. gr. li.*” *Secundum Geoff.*
 iii. 258. He adds, “ *Salem essentialem continet tartareo-ammoniacaalem, cum*
 “ *pauco oleo admisto.*” Although we have here very little acid.

S E C T. III.

It may be given in substance to ℥i. In infusion or decoction to ℥ij: the seed in emulsion to ℥ij. without vomiting; though this is brought on by large quantities. We have no preparation of it. The seed is used in the tinctura ad stomachicos.

“ *Succus ad ℥ij. iv^o. exhibetur: decoctum ad ℥vi. sæpius die iteratum;*
 “ *pulvis ad ℥i. extractum ad ℥i. vel ℥℥. Ballonius l. 2. consil. 2. observat de-*
 “ *coctum cardui bened. ad ℥ij. vel ℥iv. assumptum, urinam reddere crassum*
 “ *et fetidum.*” *Geoff.* iii. 259.

L E C T U R E LV.

C A R Y O P H Y L L U S.

S E C T. I.

Caryophyllus hortensis, caryophyllus tunica. *Offic.* Caryophylla rubra. *Ph. Lond.* p. 7. Caryophyllus altilis major. *B. P.* 207. *T.* 330. *H. Ox.* ii. 561. *C. hortensis, Park. Par.* 306. *R. H.* 286. *C. multiplex. Ger.* 588. *Betonica coronaria, sive callyophyllus major, flore vario. J. B.* iii 327. *Dianthus, floribus solitariis; squamis calycynis subovatis, brevissimis, corollis crenatis. H. Cliff.* 164. Clove July-flower.

The clove-July-flower is certainly a variety, raised from seed; as there are many others every year, and often as double, and of the same colour, but seldom so odoriferous; and so it is propagated commonly by slips or layers. From what natural species it came originally, is uncertain, as is that of all the carnations. “ *Utuntur in officinis nostris caryophyllo hortensi quam odoretissimi-*
 “ *mo.*” *Hoffman.* p. 151. The flowers or petala only are used.

“ *Ut nomen traxisse ab odoris affinitate qualicunque dubium non est: ita*
 “ *nescio sane, quæ et unde sit barbara illa vox tunica. Scaliger in Africam,*
 “ *et quidem Tunetum usque navigat. Ego cum Cæs. ero, qui truncam esse vo-*
 “ *cem*

“cem putat ἀπὸ τῆς betonica.” Vide *Hoffman*. p. 151. “Hunc alii canbri-
 “cam *Plinii* l. 25. c. 8. esse volunt. Aliis est vetonica, sive betonica altera,
 “inter nothas *Dioscoridis*; nec forte inepte. Aliis herba tunica; quibusdam
 “iphium *Theoph.* 6. hist. 2. and 7. hist. 12. sed male... Forte *Theoph.* 6. hist.
 “1. and 6. per Jovis florem (whence *Linnaeus*’s dianthus) inter coronarios fru-
 “ticis minutis foliis conditum, cujus flos sine odore tantum in coronarum usu,
 “sylvestrem caryophyllæam intellexit. *Armerii* flores dicuntur, a gallico no-
 “mine armoires & armoiries.” *B. P.* “Veteribus incognitum fuisse credo.”
R. H. Vide *Bod. in Theophr.* p. 669.

S E C T II.

These are attenuant, subastringent, and agreeably aromatic; called cephalic and cordial; and are recommended in vertigoes, apoplexies, epilepsies, palpitation of the heart, faintings, lowness of spirits, and other diseases of the head and nerves.

“Moderate calfaciunt, et siccant. Cephalici sunt ac cordiales. *Usus præ-*
 “*cip.* in vertigine, apoplexia, epilepsia, aliisque capitis et nervorum affectibus;
 “in syncope ac palpitatione cordis. Fugant lumbricos: alleviant partum.
 “Extrinsicus adhibentur in vulneribus capitis; extrahunt ossa cranii fissa, le-
 “niunt cephalalgiam et odontalgiam. *Præpar.* 1. Succus inspissatus essentia
 “dictus. Dosis a ℥ss. ad ʒss. 2. Conserva. 3. Aqua stillat. ophthalmica insig-
 “nis est, &c. 4. Syrupus. 5. Acetum, ex infusione florum.” *Schrod.* 557.

1. They are of a sweetish taste at first; then bitterish, and subastringent; and of a pleasant aromatic clove smell. This aromatic spirit is very volatile, flies off in drying or decocting: it is even lost in only bruising the flowers. Hence, says *Hoffman*, “Quemadmodum in rosa, odor et sapor in superficie est, peritque in sicca, ita in flore nostro.” p. 151. And its cordial and cephalic virtues, depending chiefly on this, are to be found more in its infusion, or simple water, than in succo inspissato, or decoction. Yet 2. The decoction is diluent, antiseptic, and vulnerary; and may be a good drink in acute and malignant fevers, &c. though the infusion, more theæ, is better. “Innumeros, Deo benedicente, solo decocto florum caryophyllorum vindicavi a febris malignis; et hoc omnibus medicinæ studiosis jurato veluti affirmo, vel potenter sudores movent, vel urinas pellunt, citra magnos naturæ motus, simulque cor corroborant, sitimque sedant.” *Sim. Paul. Quad. Bot.* p. 242. *R. H.*—
 3. They are commended also in palsies, weakness of the stomach, cardialgia, malignant and pestilential diseases, &c. They give an agreeable colour and flavour to vinegar. “Usus obtinuit in lithymia, palpitazione cordis, &c. in febris pestilentialibus dato, vel succo expresso totius herbæ ad ʒiij. vel pulvere radice ad ʒiij. Eodem tempore nares contingere oportet aceto caryophyllato, gestare lintea eodem madefacta. Idem fit in epileptics, in metu convulsionum, præcipue in vulneribus partium nervosarum. In parturientibus etiam magni fit.” *Hoffman* p. 152. “Tempore pestilentie ad contagium arcendum, lintea aceto caryophyllato madefacta gestanda et identidem olfacienda sunt, nec non illius aceti Cochlear unum aut alterum, mane utiliter assumitur ad contagium precavendum.” *Geoff.* iii. 270.

“Ex

“ Ex his floribus syrupus, conditum, acetum, in officinis præparata servan-
 “ tur, & aqua distillatur odorata. Syrupus in julapiis ac potionibus cardiacis
 “ frequenter usupatur ad $\mathfrak{z}\text{i}$. vel $\mathfrak{z}\text{ij}$; conditum ab $\mathfrak{z}\mathfrak{ss}$. ad $\mathfrak{z}\text{ii}\mathfrak{ss}$. in electuariis ce-
 “ phalicis, cardiacis, et antispasmodicis. Aqua distillata ad sudores prolicien-
 “ dos, aut exanthematum eruptionem promovendam utilis censetur.” *Geoff.*
 iii. 269. We make little use of them any way, except in syrup.

“ Analyſi chymica, florum a calycibus separatorum $\mathfrak{lb}\text{v}$. præbuerunt humoris
 “ $\mathfrak{lb}\text{iv}$. $\mathfrak{z}\text{ii}\mathfrak{j}$. $\mathfrak{z}\text{i}$. gr. xviii. olei $\mathfrak{z}\text{ij}$. $\mathfrak{z}\text{ii}\mathfrak{j}$. gr. liv. Carbonis $\mathfrak{z}\text{v}\mathfrak{ss}$. gr. xlvi. unde
 “ cinerum $\mathfrak{z}\text{j}$. $\mathfrak{z}\text{vii}\mathfrak{ss}$. ac inde salis fixi alcali $\mathfrak{z}\text{v}\mathfrak{ss}$. (ergo terræ $\mathfrak{z}\text{x}$.) et jactura
 “ fuit $\mathfrak{z}\text{iv}$. $\mathfrak{z}\text{vi}$. gr. xxiv.” Secundum *Geoff.* iii. 268.

C E N T A U R I U M.

S E C T. I.

Centaurium. Centaurium minus. *offic.* Centaurium minus. *B. P.* 278. *T.*
 122. *Dod.* 339. *R. H.* 1092. *Syn.* 286. C. minus, flore purpureo. *J. B.* iii.
 353. C. minus, rubrum. *H. Ox.* ii. 566. C. parvum. *Ger.* 547. C. minus,
 vulgare. *Park.* 272. Gentiana, foliis lineari-lanceolatis, caule dichotomo; co-
 rollis infundibuli formibus, quinque-fidis. *H. Cliff.* 81. The lesser or common
 centaury.

It grows in dry pasture grounds, here and almost in every country; flower-
 ing in June and July. It hates culture. “ Hortense solum respuit, nec hortis
 “ quamcunque adhibueris curam assuescit.” *Bod. in Theophr.* p. 87. “ Illud
 “ experientia didici, centaurium in hortis translatus, eodem perire anno, nec
 “ unquam e semine renasci.” *Ibid.* p. 1045. “ Verum in horto nostro semel
 “ succrevit ex semine, viguit, floruit, and semen perfecit.” *R. H.* 1092. Use
 the flowering tops. Herba cum floribus. *Dale* 189. Herba. *Phar. Edinb.*
Summitates Ph. Lond.

It has its name $\kappa\epsilon\upsilon\tau\alpha\upsilon\tau\iota\omicron\upsilon\omicron\upsilon$, or $\kappa\epsilon\upsilon\tau\alpha\upsilon\tau\upsilon\epsilon\iota\omicron\upsilon\omicron\upsilon$ from *Chiron* the centaur. “ Cen-
 “ taurea curatus dicitur *Chiron*, cum *Herculis* excepti hospitio pertractandi arma
 “ sagitta excidisset in pedem: quare aliqui Chironion vocant.” *Plin.* l. 25. c. 6.
 p. 635. But whether this is any of the three centaureæ *Plinii*; or the $\kappa\epsilon\upsilon\tau\alpha\upsilon\tau\upsilon\epsilon\iota\omicron\upsilon\omicron\upsilon$
 $\tau\omicron$ $\mu\iota\kappa\upsilon\tau\omicron\upsilon$ *Dioscoridis*, may well be doubted. “ Centaurium parvum quod
 “ aliqui *Limnæum* vocant, quod humecta amet loca, herba est hyperico, aut
 “ origano similis; cujus caulis dodrante altior est et angulosus: flores ad
 “ lychnidis florum similitudinem e puniceo colore in purpuram vergunt: folia
 “ minuta, quadantenus longiora, veluti rutæ: semen tritico simile; radix pu-
 “ silla, lævis et supervacua.” *Dioscorides* l. 3. c. 9. p. 175.

S E C T. II.

It agrees in virtues with gentian; and is recommended internally in weak-
 ness of the stomach, jaundice, obstructio mensium, green sickness, worms,
 agues, gout, scurvy, bites of mad dogs, &c. and outwardly for swellings, &c.
 in foot.

“ Spleneticum est et epaticum, calfacit et siccatur, amarum est citra mordacitatem, unde et leniter astringens, extergens, aperiens, vulnerarium: biliosos pituitosos humores quam lenissime per alvum educit; serum per poros discutit. Hinc utile in febribus (unde et nomen febrifugæ habet) ictero, mensibus suppressis, scotibuto, arthritide, lumbricis, et specificè in morfu canis rabidi. *N. B.* Tantæ æstimationis est ut vix vinum medicatum seu abstinches vulgus parat, cujus partem non constituat. *Præpar.* 1. Aqua, ex integra planta. 2. Extractum, *i. e.* succus inspissatus; cujus dosis ad ʒi. 3. Sal com. ex cinere.” *Schrod.* p. 559.

It is of an intensely bitter taste, but of little or no smell. “ The leaves and flowers are of an intolerable bitterness, (*font d’une amertume insupportable*), yet redden considerably the blue paper; whence we may conjecture, that the salt of this plant is not very different from the natural salt of the earth, which is very bitter, but mixed with a considerable portion of sulphur and earth.” Vide *T. Hist.* p. 68.—2. In decoction it is said to be cosmetic, and to kill lice. “ Decoctum lentigines, varos, alphas, et ceteras cutis infectiones exterit. . . Illo si lavetur caput, insigniter furfures et scabiem detergit, imo una myriades pediculorum enecat.” *R. H.* & ibi citatos. And in clysters it is said to cure the sciatica, a *Fernelio*. *Ibid.*—3. The centaureum parvum *Dioscor.* was cathartic: *Dodonæus* denies ours that quality. *C. Hoffman* says, p. 156. it purges si debita quantitas detur. Mr. *Ray* leaves the controversy to be determined by experience. I know no strong bitter but what purges if taken in a large dose. Before the cortex was known, centaury was one of the most famous febrifuga. It is commended also for malignant fevers; to make the hæmorrhoids run, &c. There is a book *De Virtute Centaureæ* attributed to *Galen*, consisting of three pages. Vide *Spur. Librorum* p. 97. B. “ In quo *Simon Pauli* duo observavit notatu digna; primum scilicet authorem extracta faciendi modum non ignoravisse; alterum quod ingens præsidium collocet in hac planta tanquam specifica in curandis canis rabidi aliorumque venenatorum animalium moribus.” *Geoff.* iii. p. 277. But if he had looked into *Dioscorides*, on this plant, he might have seen that extracts were made in his day; so long before this trifling author; who yet, at the same time, lays more stress on scarification than on centaureæ succus in this disease. “ Herba semine prægnans collecta, et diebus quinque aqua macerata, dein coquitur dum aquæ superemineat: mox ubi refrixit exprimitur, et per linteolum excolatur. Expressum iterum coquitur, usque dum mellis spissitudinem ascescat.” *Dioscor.* l. c. As for *Palmerius* his *pulvis contra rabiem*, a hotch-potch of a dozen ingredients, I think it much inferior to the centaureæ succus: but I doubt if either ever cured one of this disease. You have it at large in *Geoff.* iii. 278.

“ Analyti chymica, ex plantæ floridæ lbv. demptis radicibus prodierunt humoris lbij. ʒix. ʒij. gr. xxvii. (of which the first ʒxij. were saporis acris liguam pungentis subacidi, olei spissi. ʒxij. gr. vi. carbonis ʒvii. unde cinerum ʒxi. gr. liv. ac inde salis fixi alcali ʒij. gr. xl. (ergo terræ ʒi, gr. xiv.) et jactura fuit ʒxij, ʒvii. gr. xxxix. (sum. lbv.)” Secundum *Geoff.* iii. 276. Who adds, “ Folia et flores insigni amarore donantur, chartam cæruleam intenso rubore tingunt: salem essentialem continere videntur tartaro vitriolato haud absimilem, cum ammoniacali consociatum, et multo oleo acri et crasso

“conjunctum.” And so *T.* gives one salt, and *Geoff.* another : and both conjecture to no purpose.

S E C T. III.

It may be given in substance to ʒi.; in infusion or decoction to ʒij. : the extract to ʒʒ. It is an ingredient in the tinctura ad stomachicos, infusum amarum utrumque, and the theriaca *Andromachi*. The essential salt of this plant, or of any other, is seldom made.

“Pulvis earundem exsiccatarum ad ʒi. præscribitur, et conditum ad ʒʒ.
“Sal ex ejus cineribus ad ʒʒ. exhibetur.” *Geoff.* iii. 277. 279.

C H A M Æ D R Y S.

S E C T. I.

Chamædrys, triſſago, quercula calamandrina. *Offic.* *Chamædrys* minor repens. *B. P.* 248. *T.* 205. *H. Ox.* iii. 422. *C.* repens minor. *Dod.* 43. *C. vulgo* vera exſtimata. *J. B.* iii. 288. *C.* minor. *Ger.* 656. *C.* vulgaris. *Park.* 104. *R. H.* 527. *Teucrium*, foliis ovatis, incifo-crenatis, petiolatis; floribus laxè verticillatis. *H. Cliff.* 302. Common germander, or Engliſh treacle.

It grows in Germany (viz. *Austria*) France, Italy, &c. Though found often wild, yet Mr. *Ray* doubts of its being a native of England. In gardens it flowers in June and July. The herb, or leaves and tops are uſed. *Chamædrys* major repens, *B. P.* is but a variety, differing only in magnitude.

Chamædrys, humilis quercus, a foliorum forma.

“*Chamædrys*, quibusdam *Chamædryas*, aliis *linodrys* dicitur. Sunt et qui eam *teucrium* appellaverunt, quod cum *teucrio* quandam ſervet ſimilitudinem. Nascitur in aſperis et petroſis locis. Eſt vero frutex exiguus, drantalıs, folia habens exigua, effigie et diviſura quercus, amara : florem pene purpureum, ac puſillum. Carpi ipſam ſemine prægnantem oportet.” *Dioſcorides* l. 3. c. 112. p. 220. “*Chamædrys* herba eſt quæ Latine triſſago (alii trixago dicitur. Aliqui eam *Chamædropen*, alii *teucrion* appellavere. Folia habet magnitudine mentæ, colore et diviſura quercus. Alii ſerratam, et ab ea ſerram inventam eſſe dixere; flore pene purpureo. Carpitur prægnans in petroſis.” *Plin.* l. 24. c. 15. p. 621.—2. *Scordium*. *Offic.* *Scordium*. *B. P.* 247. *Dod.* 126. *J. B.* iii. 292. *Ger.* 661. *R. H.* 576. *Syn.* 246. *S.* legitimum. *Park.* 110. *Chamædrys* paluſtris, allium redolens. *H. Ox.* iii. 423. *C.* paluſtris caneſcens; ſeu *ſcordium officinarum*. *T.* 205. *Teucrium*, foliis ovato lanceolatis, ſerratis, ſeſilibus; floribus ſæpius binis. *H. Cliff.* 302. Water germander.

It grows in the marſhy places in the iſle of *Ely*, in great plenty; alſo in France, &c. flowering in July.” “In paluſtribus *Elienſis* inſulæ copioſe provenit.” *R. Syn.* 246. *Scordion* from *σχορδόν*; allium ob odorem alliaceum; by which, after it had been long unknown, it was again diſcovered by *William Peliffier*,

Pelissier, Bishop of Montpelier, and *William Rondelet*, (qui obiit 1566.) Professor of Medicine there, in the adjacent maritime places. Vide *Leb. Adv.* p. 220.

“Scordium in montanis et palustribus locis nascitur. Folia habet trifolij similitudine, at majora, neque ita per ambitum incisuris divisa, aliquantum vero allium redolentia, astringentia et gustu amara; cauliculos autem quadrangulos, e quibus flos subruber emicat.” *Dioscor.* l. 3. c. 125. p. 225. Hence these two plants are probably the chamædrys and scordium of the ancients.

S E C T. II.

Germander is attenuating, antiseptic, diaphoretic, and diuretic; called alexipharmic, hepatic, splenic, and uterine: and is recommended internally in obstructions of the viscera, scurvy, gout, internal ulcers, dropsy, &c. and externally for tumors, inflammations, gangrenes, &c.

Scordium differs little in qualities from the germander; but is reckoned a more powerful antiseptic and alexipharmic, and so is more used in malignant and pestilential diseases inwardly, and in gangrenes and mortifications outwardly.

“Chamædrys calfacit et siccatur. Est splenetica et epatica, saporis amari; incidit, attenuat, aperit, potenter urinam et sudorem movet. Hinc confert in febribus, scorbuto, sanguine coagulato, hydrope incipiente, mensibus obstructis; ac inprimis in arthritide. Extrinsecus in ulceribus serpentibus, in scabie ac pruritu, in catarrhis exsiccandis. *Præp.* 1. Aqua ex foliis et floribus. 2. Conserva ex floribus.” *Schrod.* p. 561.

“Scordium calfacit et siccatur. 2. abstergit, attenuat, incidit, putredini resistit, alexipharmacum ac sudoriferum est. *Usus præcip.* in peste, pestilentialibusque morbis, febribus malignis (tam preservando quam curando) in obstruct. epatis ac lienis, in pulmonibus purulentis, ac mucilagine refertis. Extrinsecus mundificat vulnera ac ulcera, lenit dolores podagricos. *N. B.* Sunt qui in mensium profluvio cum successu exhiberi volunt. *Præp.* 1. Aqua stillat. 2. Succus inspissatus. 3. Syrupus ex succo. 4. Syr. compos. 5. Conserva ex foliis. 6. Electuarium diascordium *Fracastrorii*. Dosis a ʒi. ad ʒij. 7. Sal ex cinere.” *Schrod.* p. 678.

Germander 1. Is of a bitter, and somewhat aromatic taste, and pretty agreeable, but not very fragrant smell. “Sunt folia saporis subamari, subdulcis et aromatici.” *J. B.* “The leaves are bitter and aromatic; they do not redden the blue paper; which shews they contain principles different from those of the lesser centory.” *T. Hist.* p. 69. “Odoris est aromatici, saporis valde amari.” *Nucl. Belg.* 74.—2. Germander tea is very bitter but scarcely aromatic: it made the syrup violarum a little greenish; and gave a ruby colour to the solution of turnsole: a solution of vitriol turn’d it first green; then black and opaque, it precipitating slowly. The tea was of a pale brandy colour, but a few drops of ol. tartari made it very yellow and dying, and precipitated a whitish sediment in a small quantity. When it had stood some time it became much darker on the top, or brown and opaque, which colour gradually descended, and in a day or so it was all alike to the bottom of the glass.

This is a common effect of the ol. tartari, (and also of aqua calcis, in a lower degree) upon almost every such infusion; while therefore it increases the tincture, it diminishes its strength, and the virtues it had drawn from the simple; to say nothing of its altering its nature, in many instances.—3. Externally it is discutient, detergent, and anodyne like other aromatic and subastringent bitters, serviceable in pains, tumors, ulcers, &c. “Extrinsecus adhibetur in ulceribus serpentibus, in dolore hæmorrhoidum, in auribus vermiculosis, in scabie et pruritu, in catarrhis exsiccandis.” *R. H.* And,—4. Inwardly it is recommended also in intermitting and malignant fevers, pestilence, king’s evil, jaundice, menibus obstructis, gravel, consumption, worms, &c. Vide *R. H.* Whence Mr. *Geoffroy* has transcribed almost all he has to purpose on the virtues of this plant. He names him twice, but takes much more from him than he owns. “Scribit *Vesalius* in *Epist. de China*, decoctum chamædryos fuisse commendatum a medicis *Genuensibus* *Carolo V. Imp.* pro perpetuo podagrarum exilio, (auxilio *R. H.* & *Geoff.*) facto decocto sive ex vino sive ex aqua stillatitia. Experietur qui volet.” *Hoffman* p. 162: who with *Tragus* thinks germander and betony of the same nature. The *Prince of Mirandola’s* powder, thought a specific for the gout and sciatica, is this: R Chamæd. chamæpit. cent. minoris, rad. centaur. maj. Arist. rot. & gentianæ aa p. æ. Vide *T. Hist.* p. 69. “Pulvis chamædryos celebratur inter *Ægyptios* contra febres intermittentes. *Alp. Med. Æg.* fol. 146, 147. They use the decoction of it also. “Planta ipsa in agro *Cantabrigienfi* a vulgo English treacle dicitur, procul dubio quia alexipharmaca censetur.” *R. H.*

Scordium also is bitter and aromatic, and smells something like garlick, but neither so strongly nor disagreeably. “Folia...odore allii sed remissiore et gratiore, sapore amaro.” *J. B.* “Odoris et saporis est alliacei amari.” *Nucl. Belg.* p. 265. “Scordium is bitter, aromatic, and reddens a little the blue paper. It contains a sal volatile oleosum, whereof the sal ammoniac is not entirely decomposed, but involved in much sulphur.” *T. Hist.* p. 415. Scordium tea has much the same taste with germander tea as to bitterness, but differs a little in the flavour; it acts the same way on syr. violarum, et solutio heliotropii; but does not altogether blacken so much the solutio vitrioli, tho’ it precipitates it more fully. It is a species of the same genus, and does not a little resemble it facie externa. And much the same effects and virtues are attributed to both. Vide *Dioscor.* ll. cc. Yet scordium, ever since *Galen’s* time, has been preferred as an antiseptic and alexipharmic, though the reason seems not to be very strong. “Literarum monumentis traditum est a quibusdam celebribus viris, cum in prælio interemptorum cadavera multos dies insepulta jacuissent, quæcunque supra scordium forte fortuna ceciderant, multo minus aliis computruisse, ea præsertim ex parte, qua herbam attigerant. Ob quam rem sane persuasum est, omnibus tam reptilium venenis, quam noxiis medicaminibus, quæ corpus putrescere faciunt, scordium advertari.” *Galen de Antidotis* l. 1. c. 12. p. 105. E. “*Ægineta Galeni* verbis conformia recitat. *Matthiolus* vermes necare scribit. *J. B.*

“Ex chamædryos floridæ recentis lbiv. 3x. per retortam distillatis prodierunt humoris lbij. 3vij. 3vi. gr. lxvi. olei 3ij. 3i. gr. xxiv. carbonis 3x. gr. xviii. unde cinerum 3ij. 3iß. ac inde salis fixi alcali 3iv. gr. liv. (ergo terræ 3iß. gr. liv.) et jactura fuit 3iv. 3vijß.” Secundum *Geoff.* iii. 297. “Folia amara.

“ sunt et subaromatica. Chartæ cæruleæ colorem nullo modo mutant. “ Salem essentialem continere videntur sal mirabili Glauberi similem, cum “ ammoniacali conjunctum, et multo oleo aromatico involutum.” *Ibid.*—*N. B.* According to his analysis, humoris prima portio $\frac{3}{4}$ ij. was subacida; the 2d manifeste acida $\frac{3}{4}$ 37 $\frac{1}{2}$. and the 3d of 6 ounces and 48 grains intense acida, deinde tum acida, tum alcali, et sale volatili urinoso imprægnata: and yet the leaves do not redden the blue paper. How he finds Glauber’s salt here I know not.

S E C T. III.

They may be given in substance to $\frac{3}{4}$ i. or more if not too bulky, in infusion or decoction to $\frac{3}{4}$ ℔. The scordium is an ingredient in the aqua alexiteria, aqua epidemia, aqua theriacalis, decoctum diascordii, electuarium antidyentericum, diascordium, mithridatum, theriaca: but the chamædrys in the theriaca only. “ Chamædryos pulvis ad $\frac{3}{4}$ i. exhibetur. Extractum in officinis conficitur; exhibetur ad $\frac{3}{4}$ i.” *Geoff.* 3. p. 298.

Hieronymus Fracastorius, physician to *Pope Paul III.* who died in 1553. æt. 70. is the author of the *Diascordium*; and describes it de contagionibus et contagiosis morbis, et eorum curatione, lib. iii. cap. 7. “ Et in peste correptis, acextreme “ desperatis commendat hoc modo. R Succi Iujulæ $\frac{3}{4}$ ij. succi citri $\frac{3}{4}$ i. diascordii $\frac{3}{4}$ i. specierum cordialium e gemmis $\frac{3}{4}$ ij. aceti $\frac{3}{4}$ i. omnia misceto et “ totum haurito.” *Pb. Aug.* p. 267. There is opii gr. i. in our diascordii $\frac{3}{4}$ vij.

C H A M E M Æ L U M.

S E C T. I.

Chamæmelum. Offic. Chamæmelum nobile, sive leucanthemum odoratius. *B. P.* 135. *T.* 494. Chamæmelum odoratum. *Dod.* 260. C. odoratissimum repens. *J. B.* iii. 118. *R. H.* 353. *Syn.* 185. *H. Ox.* iii. 35. Chamæmelum. *Ger.* 755. quod describ. *Park. Par.* 289. C. Romanum. *Tab. Ic.* 19. Anthemis, foliis pinnato-decompositis, laciniis fetaceis. *H. Cliff.* 415. Common camomile.

It grows in great plenty on heaths and commons in *England*, in many places. “ In *Cornwall* so plentifully that you may scent it all along as you ride . . . Supra *Londinum* sponte exit in planitie *Richmondiana* et *Branfordiana*, “ omniumque copiosissime in *Hounslowiana*. *R. Syn.* 185. It flowers in June, July, &c. The herb and flowers are used. Folia, flores. *Pb. Lond.* And of this sort only; although in foreign countries the chamæmelum, chamomilla, or camomilla, *offic.* be the chamæmelum vulgare, leucanthemum *Dioscoridis*. *B. P.* 135. “ Chamomilla est 1. Vulgaris; hæc usitatissima. 2. Romana “ seu nobilis odorata. Hæc itidem usualis. 3. Fœtida, hæc minus usualis. “ 4. Inodorata. Itidem minus usualis.” *Schrod.* 562.

“ Anthemidem, alii leucanthemon, alii eranthemon, quoniam vere floreat, “ alii chamæmelum, quoniam odorem mali habeat, nonnulli melanthemon,
alii

“ alii chrysosomen, alii denique calliam vocant. Hujus genera tria, flore tantum distantia: rami dodrantes, fruticosi, alis multis concavi: foliola parva, tenuia, numerosa: rotunda item capitula, intus quidem auri colore fulgentia, foris vero orbiculato ambitu floribus circumdata candidis, aut melinis, aut purpureis, magnitudine foliorum rutæ. Nascitur in asperis et juxta semitas. Colligitur vere.” *Dioscor.* l. 3. c. 154. p. 23—5.

S E C T. II.

It is attenuant, deobstruent, diuretic, and carminative; called stomachic and uterine, and is recommended internally in obstructions of the viscera, flatulent and nephritic colics, want of appetite, indigestion, agues, &c. and outwardly as emollient and anodyne, for inflammations, pains, contusions, tumors, &c.

“ Calfacit et siccat, 1. Digerit, laxat, molliat, mitigat dolorem, menses et urinam ciet. Eapropter usus insignis est, in dolore colico, et hinc pedistibus, qua parest. Extrinsecus usitatissimus ejus usus est, in pareticis, emollientibus, maturantibus cataplasmatibus, clysteribus, &c. *Præpar.* 1. Aqua ex vulgari. 2. Aqua ex Romana. 3. Aqua carminativa, seu composita. 4. Oleum stillat. ex vulgari. N. destillant alii cum terebinthina, unde oleum cæruleum. 5. Oleum stillat. ex Romana. 6. Oleum infusum ex vulgari. 7. Sal com. ex cinere. 8. Syr. de succo camomillæ.” *Schrod.* 562.

1. It is of a very bitter taste, and fragrant (as it were acidulous) smell, resembling that of some apples, or quinces rather. “ Folia amabili odore prædita.” *J. B.* “ Odorem spirat suavem unguenti.” *R. H.* “ Chamomilla vulgaris saporis est valde amari et calidi, odoris aromatici. Romana odoris et saporis fortioris, et magis grati.” *Nucl. Belg.* 75. “ The leaves and flowers have a strong, not unpleasant scent, and a very bitter taste.” *Miller Bot.* 130. “ Referunt folia et flores pergratum ac jucundum cum gravitate quadam odorem aromaticum. In hortis colitur.” *Geoff.* iii. 300.—2. *Herbæ floridæ thea* is of a beautiful transparent orange colour, very bitter, and smells like the plant; but not in the least viscid. It only dilutes syr. violarum et solutio heliotropii: ol. tartari does not make it fetid. Solutio vitrioli makes it turbid, and of a brownish black; and with it precipitates plentifully, becoming transparent, but brown still above. Spirit of vitriol dissolves this sediment, but the brown colour remains, and a dark gray mucus is again precipitated.—3. It is much used externally in baths, fomentations, cataplasms, clysters, as emollient, discutient, and anodyne; for tumors, inflammations, pains, &c. as for durities mammarum a lacte coagulato; (*R. H.*) colic pains, obstructions of urine, &c.—4. Internally it dilutes, dissolves, and gently stimulates; and is one of the safest, and least heating strong bitters; and commended in the cardialgia, jaundice, hysteric fits, king’s-evil, intermitting fevers, dropsy, &c. “ Nonnulli iis (leucanthemo et chrysanthemo) in farinam tritis cum oleo utuntur ad illitiones, idque ad febres periodicas abigendas.” *Dioscor.* l. c. “ Chamæmelum . . . Febres, quæ citra visceris alicujus inflammationem insistant, solvit: ac præsertim quæ ex humoribus biliosis, aut cutis densitate proveniunt. Quæ de re ab Ægyptiorum sapientissimis soli consecratum esse, febrium-

"febriumque omnium putatur remedium." *Galen Simpl.* l. 3. c. 10. p. 18. H. And in that country the flores chamomillæ are used still in their febrifugal epithemata. *Alp. M. Æg.* l. 4. c. 15. p. 146. 2. "Succi chamæmeli expressi cochl. ij. vel. iij. cum guttulis aliquot spiritus vitrioli, in jusculo exhibita, in febre quacunque intermittente, paulo ante accessum, instantem paroxysmum plerumque avertunt, et febrem ipsam curant." *R. H. Dr. Eli-sha Coysb* often found florum pulvis, in sufficient quantity, as effectual in agues as the bark itself. Vide *Morton de Feb.* c. 6. p. 43 and 44. Where he also gives the three instances in which only the cortex ever failed him in agues, and which he cured however by an arcanum of his own in the space of two days. This arcanum he does not conceal, but gives it thus. "℞ Florum chamæmeli, subtilissime pulverisat. (plus minus pro ætate) ℥i. antimonii diaphoret. salis absinthii ana ℥ss. M. F. Pulvis sumendus in haustu postetæ, vel cujuscunque julapii temperati; aut in formam boli, cum syrupo caryophyllorum; vel in formam pilularum cum mucilagine gum. tragacanthi redactus; sexta quaque hora per biduum aut triduum repetendus." *N. B. Here no astringency is mentioned.* "Dr. Strachey M. D. hujus herbæ decoctum, felici successu ad scrophulas propinare solet." *R. H. Mr. Geoffroy's* analysis I reckon an imaginary one. iii. p. 300.

S E C T. III.

It may be given in powder to ℥i. and this repeated several times in a day; in infusion to ℥ij. or 3℥. The preparations are aqua simplex, oleum stillatitium or essentiale, et oleum chamæmelinum, all from the flowers; but the herb will do as well. The flowers are much used by way of tea. They are used in the tinctura ad stomachicos, decoctum commune pro clystere, decoctum emolliens pro fotu, cataplasma discutiens, and the oleum chamæmeli (for chamæmelinum) in the cataplasma suppurans.

"Oleum chamæmelinum duplex in officinisprehenditur, scilicet vulgarissimum, quod per infusionem, alterum elegantissimum, quod, per vesicam arte chymica paratur, coloris cærulei elegantia et amœnitate ipsi sapphiro non cedens. Primum tumores duros emollit . . . Posterius oleum arte chymica ex chamæmeli Romani floribus, calidioribus præsertim in regionibus collectis, elicatum, et eorum dotibus instructum, illis qui decoctum fastidiunt, contra colicos dolores et calculum propinatur ad guttas aliquot." *Geoff. iii. 303.* See *Elshollius (John Sigismundus)* his *Destillatoria curiosa*, &c. *Berolini* 1674. in 8vo. or his ten experiments quoted in *Mangeti Pharmacop. Schrodero-Hoffmanniana*, (Genevæ 1687. in folio) p. 383. by which it appears that it is the flowers of the chamæmelum vulgare, or dog's camomile, that yields the sapphirine oil; that it communicates this colour, if distilled with summitates pini, or abietis, baccæ juniperi, &c. to the oils thus obtained; and that the flores chamæmeli Romanæ do not yield a blue, but a yellow oil. "Substituimus etiam flores chamæmeli Romani, says he, sed oleum accepimus flavescens, non sapphirinum." Which is certainly true of the oil distilled here from our camomile. These two plants therefore may differ more in their virtues than is commonly observed: as *Linnaeus* makes the dog's-camomile a species

species not of the anthemis, but of the matricaria, and calls it matricaria foliis supra-decompositis, fetaceis, pedunculis solitariis. *H. Cliff.* p. 415.

However, on occasion of the mentioning the use of this oil, *Mr. Geoffroy* (iii. 304.) says, “Simon Pauli observat, post C. Hoffmannum olea essentialia stillatitia ventriculo esse infesta. Reipsa hæc olea usu diuturno & intempestivo, ardorem accendunt in ventriculo et in renibus, hepatis obstructions pariunt, sanguinem inflammant, in quibusdam sitim perpetuam excitant, in aliis cachexiam biliosam, in aliis calidum hydropem inducunt. Quapropter non nisi maxima cautione eorum usus præscribendus est, et calidis naturis atque biliosis interdicens.” Whether in fact, and how, these come to be the effects of the too liberal and improper use of essential oils, I shall not enquire; but the caution concerning some of them is not to be contemned. The proper and specific spirit, on which depend the virtues of many simples, especially of the aromatic kind, being concentrated in their essential oils, if not sufficiently diluted, stimulate and irritate the stomach more violently than the nature of its nerves can bear, and so may cause convulsions and other bad symptoms, yea prove poisons, however salutary the simples are whence they are drawn; in the use therefore of these simples themselves there is far more safety, than in their more acrid oils. I might instance cinnamon, cloves, mint, hyssop, &c. I say acrid oils, because all essential oils are far from being equally acrid. Oleum anisi, terebinthinæ, juniperi, &c. are milder than the former, yet still the natural concretes themselves are safer; and sometimes contain virtues, which their oils want; as is manifest in the Chamæmelum. The sun’s rays diffused, warm and comfort; but concentrated, scorch and consume.

C H A M Æ P I T Y S.

S E C T. I.

Chamæpitys, iva arthritica. *Offic.* Chamæpitys, ajuga, abiga, arthetica, arthritica, iva arthritica. *Schrod.* 561. Chamæpitys, lutea vulgaris; sive folio trifido. *B. P.* 249. *T.* 208. *H. Ox.* iii. 424. *C. vulgaris*, odorata, flore luteo. *J. B.* iii. 295. *C. mas.* *Ger.* 525. *C. vulgaris.* *Park.* 283. *R. H.* 573. *Syn.* 244. Ajuga, sive Chamæpitys mas *Dioscoridis Lib.* 207. *Adv.* 164. Chamæpitys prima. *Dod.* 46. Teucrium foliis simpliciter trifidis. *H. Cliff.* 301. Common ground-pine.

It grows in several places in England. In gardens it sows itself, and flowers in July and August. “It grows in fallow fields, and chalky grounds, particularly in *Kent* in great plenty, and flowers in June and July.” *Miller Bot.* 132. “In agris arenosis, sed rarius. Junio floret.” *Dale* 156. The herb is used when in flower. “*Offic.* Folia cum floribus, seu herba tota.” *Schroder.* “Chamæpityos folia.” *Pb. Lond.* 7.

Chamæpitys “*Χαμαιπιτυς*, quasi humilis picea, quod folia piceam oleant.” *B. P.* or humilis pinus. “Chamæpitys, Latine abiga vocatur, propter abortus, ab aliis thus terræ cubitalibus ramis, flore pinus et odore.” *Plin.* l. 24. c. 6. p. 609. “Latinis ajuga dicitur, seu abiga, quod foetum abigat, et abortus faciat. Nonnullis iva arthritica, quod arthritidi medetur.” *R. H.* l. c. “Ivæ nomen barbaricum unde sit veratore opus habet.” *Hoffman* p. 162. An ab abigâ, abjuga, ajuga, juga, iva?

There

There are in *Dioscorides* l. 3. c. 175. & 176. p. 243. & 244. three species of it, viz. chamæpitys, chamæpitys altera, and chamæpitys tertia mas dicta. Some take our ground pine for the first, others for the second, and others for the third. Vide *B. P. & Bod. in Theophr.* p. 826.

S E C T. II.

It is an attenuating, antiseptic, diaphoretic and diuretic vulnerary; called cephalic, and nervine: and is commended in the gout, palsy, internal ulcers, scurvy, mensibus obstructis, hysteric fits, &c. It agrees in virtues with germander.

“ Nervosum genus roborat, calfacit 2. siccatur 3. incidit, aperit, diuretica est, “ et emmenagoga: confert in arthriticis doloribus. *Præp.* 1. Aqua ex herba “ integra. 2. Pilulæ de iva arthritica.” *Schrod.* 562.

1. It is of a bitter aromatic taste, and resinous smell. “ Sapore est amaro, non “ sine acredine quadam, quæ tamen ab amaritudine superatur; odore pinum “ refert.” *Matth.* p. 669. “ Sapore et odore picis aut resinæ.” *J. B.* “ It “ is bitter, aromatic, and reddens a little the blue paper: and hence seems to “ contain a volatile aromatic oily salt, loaded with much sulphur and earth. “ For by a chymical analysis chamæpitys yields several acid liquors, a little “ urinous spirit, much oil, and yet more earth.” *T. Hist.* p. 326. *Herbæ thea* is very bitter and nauseous, and smells strong. *Sol. vitrioli* turns it brownish, somewhat opaque, and precip. a greyish sediment. It gave no signs of an acid, nor of sal ammon. but did not stink though kept seven weeks and became mouldy. — 2. It is nearly allied to germander, and has much the same virtues attributed to it, outwardly applied. “ Exterius abstersione promovet vulnorum “ ac ulcerum solidationem, duritierum discussionem, &c.” *Hoffman.* p. 162. And 3. Inwardly is much commended in all arthritic pains; “ Purgare etiam “ ex Dioscoride, Plinio, et Aetio portendunt quidam: hinc apud Matthiolum “ in *Dioscor.* p. 670. sunt pilulæ ex iva, de quibus promittunt, si quis utatur “ in Podagra singulis mensibus fore immunem. Simplicior descriptio apud “ *Lobellium* est *Obs.* fol. 208.” *Hoffman* p. 162. Also in the epilepsy, vertigo, jaundice, asthma, hard labour, &c. “ Fœtum mortuum et secundinas pellit, “ adeoque potentur operatur, ut usus ejus in utero gestantibus omnino inter- “ dicatur, quoniam abortum facit.” *R. H.*

“ Analyti chymica, ex totius plantæ floridæ lbv. prodierunt humoris lbij. “ 3xv. 5ij. gr. lx. olei 3i. 5vii. gr. xii. carbonis 3x. 5v. gr. xii, unde cinerum 3v. 5vij. ac inde salis fixi salis 3i. et jactura fuit 3iv. gr. lx.” Secundum *Geoff.* iii. 306. I suspect the accuracy of this analysis. Here are only olei 3xv. while chamæd. lbv. yield more than 3xxvii. 3i. Here salis salis 3i. there salis alcali 5v. gr. xx. “ Amara est et aromatica hæc planta, et succo suo chartam “ cæruleam rubro colore inficit. Sale essentielle tartarco aliquantisper alumi- “ noso, multo oleo et terra implicito instructa videtur.” *Ibid.* p. 307. It is “ one of the aromatica, aperientia deterfiva, et antiscorbutica leniora, in *Boerh.* *Lib. de M. M.*

S E C T. III.

It may be given in substance, infusion, decoction, &c. like germander or scordium. It is one of the ingredients of the theriaca andromachi.

CHELIDONIUM. }
CICHORIUM. } *Vide* ROOTS.

C I C U T A.

S E C T. I.

Cicuta offic. *Cicuta major*. *B. P.* 160. *T.* 306. *Cicuta vulgaris*, major. *Park.* 932. *H. Ox.* iii. 290. *Cicuta.* *Dod.* 461. *Ger.* 1061. *R. H.* 451. *Syn.* 215. *J. B.* 3. 2. 175. *Conium*, feminibus striatis. *H. Cliff.* 92. *Cicutaria*, vulgaris. *Clus.* *H.* ii. 200. Common hemlock.

It is common enough in fat and waste places, about towns &c. flowering in July. The leaves are used. "*Officin.* Folia et radix, sed raro." *Schrod.* 566. "*Herba.*" *Pbar. Edin. Usu.* "*Herba radix, semen.*" *Dale* 127.

This is generally believed to be the *κωνειον* and *cicuta antiquorum*; and it seems to agree pretty well to the description given of it by *Dioscorides* l. 4. c. 79. p. 276. "*Cicuta caulem edit geniculatum uti et fœniculum, grandem: folia ferulæ, sed angustiora et gravi odoratu: in cacuminibus autem ramorum propagines et umbellas, florem quoque albicantem, et semen ceu anisi at candidius: radicem denique concavam, minimeque profundam.*"—*Pliny* (l. 25. c. 13.) says "*Caulis levis et geniculatus ut calami, nigricans, altior sæpe binis cubitis, in cacuminibus ramosus: folia coriandri teneriora, gravi odoratu, &c.*"

S E C T. II.

It is narcotic, and used only outwardly as anodyne and discutient, for inflammations, hard tumors, &c. It is an ingredient of the unguentum populeon; and gives name to a plaister.

"*Quamvis summe frigida censeatur, atque inter venenata referatur a Dioscoride; nihilominus tamen frequens ejus usus modernis est in tumore ac inflammatione lienis, succus emplastro splenetico incoctus extrinsecus adhibetur: hinc in inflammationibus aliis, quinimo adhibetur quoque nonnunquam in collyriis. Præp. Emplastrum de cicuta spleneticum.*" *Schrod.* 566.

1. It is somewhat of an acrid taste, and strong fetid smell. "*Folia odore ingrato, sapore non ita, sed nonnihil acri . . . Tota planta, viroso odore perniciousum testatur.*" *J. B. R. H.* "*Spirat odorem nauseabundum, horridum; acrimonia quadam linguam pungit.*" *Wepfer. Cicut.* p. 22. "*Mini in puero, qui flores (viz. flores African.) mandere inceperat, labia et os*

flata me videre; sicuti crebro iis accidit, qui cicutæ fistulis ludentes aut molantes, intra labia eas aliquamdiu continuerunt." *Dod.* 256. "The whole plant has a strong rank smell." *Miller Bot.* 138. "Tota odoris est fortis et ingrati." *Nucl. Belg.* 79. "This plant has an herbaceous salt taste; it smells of fetid oil, and reddens very little the blue paper: whence we may conjecture it contains a salt resembling sal ammoniac, involved in much oil and earth." *T. Hist.* p. 258. "Totius plantæ sapor herbaceus falsus est, odor narcoticus, foetidus. (above he says, ingratum, gravem, virosūque odorem spirat.) Succus chartam cæruleam rubro colore perparum inficit. Unde conjicere licet cicutam sale ammoniacali donari, cum multo oleo et terra permisto." *Geoff.* iii. 325. Hence *T.* can as well guess the constituent principles without an analysis, as *Mr. G.* can with one.—"Analyfi chymica ex foliorum et caulium tenerorum libv. prodierunt humoris libv. 3ix. 3ß. salis vol. urinosi 3i. gr. xx. olei 3ixß. carbonis 3iij. 3iij. gr. xviii. unde cinerum 3xii. gr. xii. ac inde salis fixi mere alcali, 3vi. gr. lvi. (ergo terræ 3v. gr. xxviii.) et jactura fuit 3ij. 3i. gr. xlv." Secundum *Geoff.* iii. 324. And cicuta contains the same principles with many other plants of a very different nature.—2. Hemlock is not poison to every other animal. Not only some birds eat the seeds, but several beasts will feed on the leaves. Canit *Lucretius* "Pinguescere sæpe cicuta barbigeros pecudes, homini quæ est acre venenum." I have seen asses and sheep also eat it greedily.—3. All its effects externally applied, point out its narcotic quality. As 4. There are too many instances on record of its bad effects, to leave any room to doubt of its virulency. Vide *Wepf. Cicut.* p. 17,—34, &c. Where, among many others, there is an account of two monks, who became delirious and fancied themselves ducks, &c. from *Kircher's Scrutinium Pestis*. Yet there are not wanting who are of another opinion; because forsooth some small quantities of it had no ill consequences. I hope, if they make experiments, it will be on themselves. "Est cicuta in lethalium venenorum genere; &c." *Dioscorides*. "Cicuta quæ venenum est, publica Atheniensium pœna invisâ; ad multa tamen usus non contemnendi." &c. *Plin.* Pulvis radicis ad 3i. in febribus malignis, vel quartana ante paroxysmum, exhibitus, omnibus, quæ ego unquam expertus sum, diaphoreticis antecellit." *D. Bowle. R. H.* Vide *Wepf. Cic. Aq.* p. (38. potius) 312.

C O C H L E A R I A.

S E C T. I.

Cochlearia, cochlearia hortensis, cochlearia rotundi folia, cochlearia Batava. *Offic.* Cochlearia, folio subrotundo. *B. P.* 110. *T.* 215. Cochlearia. *Dod.* 594. *J. B.* ii. 942. *R. H.* 822. *Syn.* 302. C. rotundi folia. *Ger.* 401. C. major, rotundifolia, sive Batavorum. *Park.* 216. C. major, Batavica, subrotundi folia, sive Batavorum. *Park.* 286. C. major, Batavica, subrotundo folio. *H. Ox.* ii. 308. Cochlearia, foliis radicalibus subrotundis; caulinis oblongis, sinuatis. *Fl. Lap.* 212. *H. Cliff.* 332. Common scurvy-grass.

It

It grows plentifully in many places, at a distance from as well as near the sea, in Britain, Holland, and even Lapland. But it is much cultivated in gardens, flowering in April; sowing itself. There are some varieties of it, of which the cochlearia, folio sinuato. *B. P.* Cochlearia marina. *Pb. Edinb.* or sea-scurvy grass is one; but it is never used. *Inusitata. Schrod.*

Cochlearia a foliorum forma.—Some have imagined it was the telephium, and others the Britannic herb of the ancients; but being probably a native of the more northern countries, it seems not to have been known to them. *Valentinus Andraeus Moelenbrock* published his *Cochlearia curiosa*, &c. *Lipsiæ* 1674. in 8vo. *N. B.* I have not seen so small a treatise (of 140 pages only) so far as I remember, introduced with greater solemnity: it is dedicated to the *Acad. Nat. Curiosorum*, and the author complimented in Latin verses, by six different learned persons. The *index* takes up 26 pages, and *errata* one.—The leaves, or for distillation the herba florens, (folia *Schrod.* and *Pb. Lond.* herba *Pb. Edinb.*) are used.

S E C T. II.

It is acrid, antacid, detergent, diaphoretic, and diuretic, agreeing with horse-radish in virtues; called splenic, and a specific antiscorbutic: and is commended in all diseases from acid and phlegmatic humors, or muriatic acrimony; and outwardly for foul ulcers, spongy gums, scabs, and other diseases of the skin.——

“Calfacit & siccit a. gr. 2. ad 3: aperit, est splenetica & diaphoretica, fixos ac crudos humores spirituales ac volatiles reddens, putridum resistens. Hinc utilis in hypochondriacis, morbisque tartareis primæ regionis, ac precipue in scorbuto, in cujus medicatione celeberrima audit, adhibeturque intus & extus, in gargarismis, ad putredinem gingivarum, balneis ad artuum resolutionem. *Præpar.* 1. Conserva, ex foliis. 2. Aqua stillatitia, ex foliis recentibus. 3. Syrupus ex succo. 4. Sal volatile, ex succo. 5. Spiritus, e foliis fermentatis. 6. Succus expressus. *N.* Recens maximæ est efficacix ad arcendam oris et gingivarum putredinem, etiam post morbillos. Inspissatus loco extracti assumi poterit.” *Schrod.* 569.

For 1. It is of an acrid bitter taste, and pungent smell, not very agreeable in either. “Totius plantæ sapor cum amarore quodam acris, nasturtium respiciens, sicut et odor.” *J. B. R. H.* “Odoris est fortis, fere instar sinapios, saporis acerrimi et calidi.” *Nucl. Belg.* 84. “Both leaves and flowers have a biting hot taste.” *Miller Bot.* p. 142. “Foliis est acribus, pungentibus, amaricantibus, odoris nidorosi, ingrati.” *Geoff.* iii. 343.—2. Foliorum thea is not much tinctured, smells a little of the herb, and is very bitter, but not hot to the taste. It only dilutes syr. violarum: makes no change on the blue paper, and very little on the (tincture or) solutio heliotropii, bringing it only to an amethyst colour, and so does not redden it so much as did horse-radish tea. Solutio vitrioli turned it to a deep transparent green colour, and in a day’s time precipitated a little dark grey sediment, which calcined became red like colcothar.—3. Its acrimony and virtues are volatile, rise easily in distillation, and are lost in drying; and it yields plenty of volatile, but no fixed alkaline salt, or

very little, (Vide *Boer. Chem.* ii. p. 33. No. 6.) and some oil: so that it is a natural *sapo volatilis*; yet not so acrid as redcole.—4. Externally it heats, inflames, and deterges powerfully. “*Cochleariæ succus*, (cum herba contusa, imposita, “et alligata), faciei maculas sex horarum spatio tollit, postea vero decocto fur-“furis est abluendus.” *D. Palmer è Prælect. D. Hermannii.*” *R. H.* This is not in the *cynofura*.—5. Inwardly it attenuates, dissolves, volatilises the humours; and is much used in the scurvy, cachexy, dropsy, green-sickness, vapours, &c. “*Cochlearia acris est*, et calida, sale volatili abundat . . . Partes ejus in qui-“bus præcipua vis et utilitas consistit, admodum volatiles sunt et coctione facile“evanescent . . . “In epilepsia contortas partes fovere convenit spiritu coch-“leariæ, quo sæpissime hostem fugari gloriari possumus.” *E. Dolco. R. H.* Where in *excrementia gingivarum scorbutica*, alum is added to the *succus cochleariæ*.

“*Analyti chymica cochleariæ floridæ lbv. demptis radicibus præbuerunt*“*humoris (primo albicantis deinde limpidi saporis acris pungentis, odoris pe-*“*netrantis, cochleariam crudam referentis; tandem saporis minus acris, et aci-*“*di lbij. 3xivß. gr. lx. humoris acidi empyreumatici, postea acidi austeri,*“*lbi. 3x. gr. lx. humoris rufescentis, sale volatili urinoso impregnati 3vii. gr.*“*xxiv. in all humoris lbiv. 3ix. 3v. olei spissi 3vi. carbonis 3ij. 3i. gr. liv. unde*“*cinerum 3i. 3vi. gr. vi. ac inde salis fixi mere alcali 3vi. gr. xlvi. (ergo ter-*“*ræ 3vii. gr. xxx.) et jactura fuit 3ij. 3ij. gr. xliv.*” *Secundum Geoff. iii. 343.* But here are but 3vii. gr. xxvi. so that gr. xlvi. are wanting of lbv. It is a very singular plant if this be a genuine analysis. “*Phlegma, quod primum*“*in distillatione prodit, turbidum est ab oleo quodam tenui, acri, pungente,*“*et summe volatili, a quo plantæ odor et sapor acris præcipue pendent.*“*Præterea sale essentiali ammoniacali donatur hæc planta, copioso phlegmate*“*diluto.” Ibid. p. 344.* Here also, as is ordinary, much more is borrowed from *R. H.* than is owned.

S E C T. III.

The juice, conserve, and infusion are given by ounces; the *spiritus cochleariæ* to 3ß. It is one of the ingredients of the *succi antiscorbutici*, *aqua Raphani composita*, the *spiritus cochleariæ*, and of the *tinctura laccæ*.

N. B. *Cochlearia* is one of the *antacida*, *acria alcalescentia*, et *specifica scorbutica acriora vegetabilia*, in *Boerh. Lib. de M. M.*

C R O C U S.

S E C T. I.

Crocus, offic. Crocus sativus. B. P. 65. T. 350. Crocus. Dod. 213. J. B.“*ii. 637. Ger. 151. R. H. 1176. Syn. 374. C. verus, sativus, autumnalis.*“*Park. Par. 167. C. autumnalis, sativus; seu hortensis. H. Ox. iii. 335.*“*Crocus, flore fructui imposito, autumnali. H. Cliff. 18. Saffron, and true saf-*“*fron-crocus.*

Crocus,

Crocus, floribus fructui impositis, tubo longissimo. *Royen. Lug.* 41. *H. Ups.* 15 M. m. 10. C. spatha univalvi radicali; corollæ tubo longissimo. *Sp. Pl.* p. 36. Auctori huic omnes croci autumnales et vernaes sunt nisi varietates. Habitat, inquit in Alpibus Helveticis, Pyrenæis, Lusitanicis, Thracicis.

Where it grows naturally I cannot find. *Linnaeus* l. c. makes the crocus *Alpinus autumnalis*. *B. P.* 65. a variety of the crocus sativus. *B. P.* and adds, "Crescit in Thracia, Lusitanæ rupibus, Pyrenæis. An hæc a sequenti (to wit, the vernal crocus) pro specie, vel pro sola varietate sit habenda, dijudicent quibus dijudicandi est facultas. Stigma hujus floris est, quod sub nomine croci in officinis prostat."—"Crocum montanum primum (which is the c. alpinus autumnalis, *B. P.*) nascitur in nonnullis Lusitanæ rupibus, præsertim iis quæ non procul a mare absunt, ubi Novembri observabam, et cum suo flore eruebam, anno 1564. et amicis in Belgium mittebam. Istic etiam Septembri floruit." *Clus. Hist.* 209. Though the mountain autumnal crocus, and the spring crocus, and their varieties, carry here plenty of seed, yet the true saffron never bears any. The embryo-fructus is scarcely visible. "De loco natali ubi sponte oritur, nihil certi traditur: feritur autem in plerisque provinciis, ut Sicilia, Italia, Pannonia, Gallia, Germania, Anglia. De semine altum apud botanicos est silentium . . . Semen apud nos quantum audivi, nunquam fert, nec alibi ut puto, in frigidioribus: in locis autem ubi sponte oritur, semen perficere, minime dubium est." *R. H.* The stigma of it differs widely from that of all the other croci; so if ever it carries seed, it is evidently a different species: if it is always barren, it must be a variety; but only if it came originally from the seed of another crocus. And indeed altum est de semine silentium, as *R. H.* expresses it. Yea Theophr. and Pliny say it is propagated by the roots (only): and *Crescentius* an Italian, (in his *Agricultura*, Basilæ 1538. in 4to) says it is not sown for a very good reason, viz. quia semina non producit. *J. B.* ii. 638. which is one singularity. In our gardens it begins to put out its leaves about the middle of September; and towards the end of it, and all October, it flowers: which will stand or remain in fair weather, four or five days, after the saffron appears in them, and may be gathered.

"Floris flammea stamina (instar antheræ) officinarum crocus est." *Schrod.* 574. "Crocus flor. stamina. (i. e. florum stamina.)" *Pb. Edinb.* p. 8. "Crocus, saffron; the flowers and stamina, manured saffron, *Casparis Bauhini.*" *Lewis. Pharm Edingb.* p. 26. Here is a double error; which may make some believe that the author was unacquainted with books which treat of simples, if not with the simples themselves. "*Ufu styli terni, prælongi, flammei ruboris.*" *Dale* 245. But saffron is only the upper end of the stylus, or appendix ovarii, which is divided into three slender, trumpet-like, parts, and of a deep red, or yellow colour, and which *Linnaeus* calls the stigma; and has not its like.

The flowers are gathered every day; and the saffron, being picked out of them, is dried in little portable kilns, made for that use; and formed into square cakes. Great quantities of it grow in England, particularly in Essex, Suffolk, and Cambridgeshire. It is computed, that an acre of good ground, well managed, may yield, communibus annis, lbviii. & ix. of good dry saffron, or in three years lbxxvi. (about lbv. of wet going to make lbi. of dry saffron.) The whole expences will not exceed in three years 23 pounds 12 shillings: and con-

sequently.

sequently, reckoning the saffron to sell, one year with another, at 30 shillings per pound, the neat profits of an acre of saffron, will amount to five pounds, two shilling and eight pence annually. See an account of the culture and management of saffron, by Dr. J. Douglas, *Phil. Transf.* No. 405. or in *Miller's Dictionary* Vol. I. Art. Crocus. I found that 14 and sometimes 15 flowers afforded only one grain weight of dry saffron. So that 3xvi. Troy-weight of saffron require 107520 flowers; no wonder it sells dear.

Dioscorides l. 1. c. 25. p. 20. prefers the Corycian saffron to all other; next to that the Lycian, then the Æolian: but the Cyrenaic and Sicilian, he says, viribus minus pollent; quippe cum sint omnia olerum instar sativa. "Crocus in Vientiensi agro optimus hodie nascitur. Qui ex locis orientalibus, ac præcipue ex Sicilia transmittitur, in cujus monte (Caryco nomine) omnium præstantissimus provenire censetur, orientalis dicitur; vulgoque crocus de aquila." Vide *Schrod.* 574. Some esteem most the Calabrian. The French like their own best. The Spanish is generally condemned, as spoiled with oil. But here no saffron is comparable to the English: not because "the best saffron in the world grows in England," (as *Miller Bot.* 160. asserts), but because we can have it fresh, genuine, well cured, without any foreign mixture, or being spoiled by previous infusions. For no doubt Italian, French, or even Spanish saffron, if as recent, and well managed, would be as good as the English; but such is not to be found in Britain: so that crocus Anglicus only should be used here.

For saffron is easily sophisticated, adulterated, and spoiled, and the cheat not easily discovered. "Hodie scribit *Coff.* (in *Diacur. Mesue* p. 104.) adulteratur carnis bubulæ filamentis: sed adulterium deprehenditur ab iis, qui sæpe tractarunt crocum ingenuum. Color enim est minus vividum, nec inficit manus." *Hoffman* p. 200. Sect. 13. "Qui vulgo venditur fere est corruptus cartamo, seu crico, quem crocum Sarracenicum vocant." *R. H.* But the most common fraud is to mix a little good saffron with a great deal of that whence the tincture is drawn, or is otherwise spoiled. This I have seen practised in Holland, where the druggists sell three or four sorts of saffron, at very different prices; but where the dearest is in reality the cheapest. "There are three sorts of saffron in the shops; two from abroad, one the produce of our own country, vastly preferable to the two former, and which should be alone used in medicine. This is of a fiery red colour, and yields a very deep yellow tincture: its blades are broader than those of the foreign sorts. It should be chosen fresh, not above a year old, in close compact cakes, neither dry, nor yet very moist, of the same colour within as without, and of a strong acrid smell." *Lewis Pharm.* p. 26.

"Crocum natura herbaceum, folio, angusto, nam fere in capillamenti modum foliatur; sero floret, seroque germinat, aut præmature: utro scilicet modo tempus acceperis. Floret quippe vergiliarum occasu, paucisque diebus. Confestim vero cum folio florem quoque expellit, quin immo prius. Radix multa, carnosa, in totumque vivax. Radiceque pede attrita melius provenit, ideo juxta semitas, aliaque loca pedibus trita commeantium, pulcherrimum exit. Satus radice fieri asolet." *Theophr. H.* l. 6. c. 6. p. 644. "Crocum in uso medico præstantissimum est Corycium, recens ac probe coloratum, paulum candidi gerens in capreolo, oblongum, suis partibus omni-

“bus constans, minime fragile aut pingue, plenum, cujus dilutum manus inficiat, non cariosum aut humidum, odore illiciens ac leviter acre. Nam quod tale non est, aut vetustum est, aut maceratum.” *Dioscor.* l. 1. c. 25. p. 20. (Vide *Bod. in Theoph.* p. 66, ad 667.)

That this is the *κροκος* of the ancients is evident from what Theophrastus, Dioscorides, Pliny, &c. have said of it. In *Hebrew* it is called *carcom*, and is one of the curious plants of the garden described by Solomon, *Cant.* iv. 14. In the *Septuagint* *Ναρδος και κροκος καλαμος και κινναμων*, &c. Spikenard and saffron, calamus and cinnamon, &c. In Arabic, *sapharan*, *Celsus Pl. S. S. 2. p. 11.* whence the modern names: *κροκος* in *Homer* (*Hymn to Pan*, v. 25.)

Εν μαλακῷ λειμῶνι, τοῦτι κροκος ἂ δ' ὑακινθος.
Εὐωδὸς θάλασσαν. —

In molli prato, illic crocus et hyacinthus suaviter spirans, &c. *Crocus* et c. *Ægyptius* in *Hipp.* though not among the *plantæ Ægyptiæ* of *Alpinus*. In a word, it is celebrated by all the ancients. “Cui jure applicem *Martialis* versum l. 4. *Epig.* 10. Nec poteris croci dotes numerare, nec usus.” *Cels.* l. 1. p. 11.

Ἦως μιν κροκοπέπλος ἐκιδ' ἔνατο πᾶσαν ἐπ' αἶαν. *H. O. Ψ. 1.*

Aurora quidem croceo-peplo-induta, spargebatur totam per terram.

Tithoni croceum linquens aurora cubile. *Æneid* iv. v. 585.

Crocus, or *crocum*, from *κροκίς*, or *κροκη*, trama, filum, the filaments in the middle of the flower being the only useful part of the plant. Hence also the stamina of other plants are called *κροκιδες*; as of the *nymphæa*, *Dioscor.* l. 3. c. (131. in *Hoffman* and *R. H.* errore pro c.) 148. p. 233. and of the *lilium*, *Plin.* l. 21. c. 5. p. 544. Vide *Hoffman* p. 198. and *R. H.* 1173. But in the places cited, *Saracin* has it *κροκιδες*, and *Dalechamp* *crocis*. The *Arabians* call it *sahafaran*, (*Hertodt*), *zapheran* (*Lemery, D.*) *zahafaran*, (*Geoffroy*) or *zaffaran*; “*Arabes zaffaran, aut potius zahafaran habent, quam vocem omnes, quod sciam, Europæi receperunt.*” *Hoffman* l. c. and hence *saffron*.

N. B. “The saffron flowers blow in September, but the leaves come not forth till the spring. *Miller Bot.* 159. “*Crocus commodissime et vulgarissime per bulbos propagatur, ex semine enim ejus tardior est proventus, (he says above, radice est tuberosa.) Hi bulbi verno tempore terræ committuntur. Folia tantum viridia hoc anno proferunt, flores vero anno sequenti mense Octobri. Flores unum aut alterum tantum diem, postquam expansi fuerint, durant. A floribus prodeunt subinde folia, quæ tota hyeme virescunt, arescunt hæc, ac prorsus deperduntur vere, et nunquam per æstatem apparent. Quamprimum flores expanduntur, leguntur oriente vel occidente sole . . . Radix mense Octobri, cum planta floret, bulbo constat singulari, sequente autem vere et æstate, duplici, quorum alterum alteri superius insidet. Cum enim veris initio folia increscunt, superior radicis pars ex qua folia exeunt crescit pariter, donec æstate parentem cui insidet, mole æquet. Hac itaque solidam, plenam, succosamque constitutionem nacta, radix inferi-*”
“or

“ or languida, exsucca et flaccida redditur, atque autumnus tota evanescit.
 “ Postquam defloruerint bulbi, eximuntur e terra, quod Octobri exeunte con-
 “ tingit. Servantur per totam hyemem in sicco loco nulla terra involuti, &
 “ procul a radiis solaribus, ne coquantur, sed ut plenius maturescant; quod
 “ ex foliis si sicca evadant, dignosci potest. Dehinc redeunte vere iterum in
 “ terram inferuntur.” Thus *Geoff.* ii. p. 283. & 284. Vide *Hertodt.* p. 16.
 vel *Petri Laurembergii, Appar. Plant.* c. 6. f. 46. Here are no less than a do-
 zen of gross errors, which would never have seen the light, if either the au-
 thor, or his editors, had known any thing of the history, or culture of this
 plant; though they describe it, and that with its fruit and seed too; which I
 have not met with any where else. For the botanical character of the genus
 is taken from the other species, not from the crocus sativus. *B. P. Miller's*
 blunder is but a trifle to these.

“ Adulteratio croci adeo impostoribus communis est, ut emporiis nonnullis
 “ visum sit certos deputasse inspectores, quorum judicio ut bonus crocus ve-
 “ nalis pronuntiatur; ita adulteratus Neptuno, Vulcanove, non citra vendito-
 “ ris ignominiam, consecratur. Cujus rei exemplum hic Francofurti, aliquot
 “ abhinc retro annis, observare licuit.” *Schrebd.* 574.

S E C T. II.

Saffron is an attenuant, diaphoretic, and anodyne aromatic; a famous cor-
 dial; and said to be alexipharmic, cephalic, nervine, pectoral and uterine. It
 is commended internally in lowness of the spirits, palpitation of the heart, ver-
 tigoes, syncopes, asthmas, jaundice, menses et lochiis obstructis, hard labour,
 vapours, measles, small-pox, malignant fevers, &c. and externally for inflam-
 mations, pains, tumors, &c. *ad multa utilis.*

“ Cordialis est ac pulmonicus, ut quoque anima pulmonum audiat, et ute-
 “ rinus; et hinc cæteris visceribus familiaris. Calfacit 2. siccatur 1. aperit, di-
 “ gerit, emollit, anodynus est, somnum conciliat, menses ac fœtum pellic.
 “ Usus frequens in syncope, apoplexia, (gutta i. aut ij. tincturæ aspergitur lin-
 “ guæ) in hysteris affectibus, in ictero, in peste, aliisque venenosis morbis, in
 “ asthmate (cum oleo amygd. dulcium.) Dosis ad ʒi. extrinsecus in collyriis,
 “ et similibus adhibetur. *Præp.* 1. Species diacurcuma. 2. Tinctura seu essen-
 “ tia croci. 3. Extractum. 4. Oleum croci *Mesue* compositum. 5. Oleum
 “ stillatitium, sed rarissimum est, ob nimios scilicet sumptus quos requirit.
 “ Nimirum ex croci lbi. vix olei ʒi. elici poterit. Habet potestatem proster-
 “ nendi appetitum. 6. Trochisci de croco. 7. Electuarium de ovo dictum.
 “ 8. Emplastrum oxycroceum. *N. B.* Usus croci immodicus, scilicet ad ʒij.
 “ vel ʒiij. lethalis censetur.” *Schrebd.* 574. Stimulans aromaticum est, in *Boerh.*
 “ *Lib. de M. M.*

For 1. It is of a soft, or as it were oily, bitter, and agreeably aromatic taste;
 and fragrant diffusive, and somewhat pungent, though pleasant scent. “ Sta-
 “ mina colore flammeo subrubentia, odore, cum inaruerint, forti et caput im-
 “ plente.” *Ded.* 213. Stamina ex rufso-punicea collecta aroma celebre confici-
 “ unt, omnibus crocus seu crocum appellatum, gustu amariuscule, odore ju-
 “ cundo, acri, late spirante, oculos aliquantum mordicante, lachrymas profun-
 “ dere

“dere cogente, et modice, cum suavitate non ingrata, caput aggravante son-
 “numque conciliante.” *Bod. in Theophr.* p. 666. whose description of this plant
 is copied in *R. II.* “Olore peculiari, jucundo, acri, aromatico, subtili et late
 “spirante, oculos aliquantulum mordicante, modice caput gravante, soporem-
 “que conciliante, sapore amariuscule.” *Geoff.* ii. 282. “Olorem spargit fra-
 “grantem in distans spatium; et saporis est acris, balsamici et subamari.”
Nucl. Belg. p. 92. And it is observable that it is more odoriferous after it is
 well dried than before. Wet saffron, or saffron in the flower, has comparative-
 ly but little scent.

Hence it keeps well, and may be preserved, viribus fere integris, several
 years; and affords not much by a simple distillation. Vide *Zwelf. Pharm.*
Reg. 703. and *Hoffman*, in *Schrod. Mang.* p. 400. — 2. It contains very little
 essential oil. (Vide *Schrod.* supra.) “Oleum essentielle croci nullibi extare legi-
 “mus, nec vidimus.” *Zwelf.* l. c. p. 704. “*Prof. Neumannus* denies that an
 essential oil, fixed sulphur, and volatile salt can be separated from saffron,
 which he calls, “corpus mixtum aquoso-gummoso-terrestre, in quo, says he,
 “quædam partes adsunt oleosæ rarefactæ, una cum resinosis, nec non subtilissi-
 “mis salinis, haud tamen inde separari queant. Ex croci enim in balneo sic-
 “cati ʒijʒ. per distillationem obtinuit liquoris grate-olentis ʒß. in quo nullum
 “adfuit oleum substantiale. Residui erant ʒij. Ex cujus ʒi. obtinuit extracti
 “spirituosi ʒv. ʒi. extracti secundi aquosi ʒi. ʒß. et partis terrestris ʒiß. (here
 “was nothing lost.) Ad alteram croci ʒi. primo assumsit aquam et habuit
 “extracti primi aquosi ʒvi. extracti secundi spirituosi ʒi. et remanentiæ ʒv.
 “(why more than before?) Unde apparet partes gummosas in croco prævalere
 resinosis.” Vide *Rieger. Introd.* ii. 1143. who adds, “si credamus auctori anno-
 “tationum ad Neumanni locum, oleum essentielle separatum omnino haberi po-
 “test, et quidem ad pondus ʒiß. ex croci ʒbi. quod adeo penetrans, mordaxque
 “est, ut gut. i. degustata, vel per 20 ad 30 horas in lingua sentiatur; ac a quo-
 “libet produci potest ex extracto cum aqua facto, modo saltém croci ʒßß. assu-
 “matur.” — If this be fact, well might Boerhaave, on a new account, call crocus an
 “heteroclytum corpus quod vix referri queat ad aliquod notum rerum genus.”
 Vide *Chem.* ii. 244. — 3. It yields its tincture and strength equally to spirit
 and to water; yet, they say, oil draws nothing from it. I infused ʒij. of my
 own saffron in sp. vini Gallici ʒij. and after some days filtered it, and the dried
 residuum weighed only gr. lv. though the saffron was more than two years
 old. — 4. Externally applied it eases pain, softens, discusses or ripens; and is
 used in collyriums for sore eyes; in cataplasms, &c. for burnings, cramps, gan-
 grenes, &c. applied to the temples, it is said to procure sleep; yea, and the
 smell or vapour of it to have proved sometimes mortal. Although *Galen*
 in several places commends crocus for pains, as of the eyes, ears, &c. yet he
 says “Quidam ex ejus usu capite læduntur, quod ipsum sæpe ex solo croci
 “odore perpetimur Sunt qui neque croci odorem citra molestiam
 “ferunt, sed statim capite replentur.” *κατ. τοπ.* l. 2. p. 135. D. — “Vapo-
 “rem croceum mortiferum extitisse refert *Borellus*, (*Obs. Cent.* 3. f. 303.) de
 “quodam famulo mercatoris, qui juxta magnam croci copiam decumbebat et
 “dormiebat, cum vero nullum malum inde procedere posse existimaret, atque
 “in eadem officina semper remaneret, inde tantum dolorem capitis, tantamque
 “cordis debilitatem contraxit, ut vitam cum morte commutaret. Similes his-

“ torias scribit *Costæus*, multos qui croci sacculo pulvinaris instar usi essent, o-
 “ borto insigni capitis dolore, cum incredibili gravitate interiisse.” *Crocologia*
 (seu *curiosa croci regis vegetabilium enucleatio*, &c. *Jenæ* 1671. in 8vo.) p. 33.
 —5. It is said to be very hurtful to horses. “ Equis maxime exitialem esse
 “ crocum, ex veterinatorum (*veterinareorum*) relatione scribit *Friccius*, modicam
 “ nempe ejus quantitatem, etiam validissimo equo exhibitam, lethale urinæ
 “ profluvium causari.” *Rieger. Introd.* ii. 1154. “ Audivit etiam *Borellus*
 (*Obs. Cent.* 3. f. 303.) equos mictu sanguineo perire, dum croci copiam ferunt.”
Hertodt. p. 33. “ Borellus in his observations speaks of a person, who by
 “ carrying a parcel of saffron a long journey, for the sale of a market, was
 “ so affected, by its scent only, as to piss blood.” *Quincy Pharm.* p. 156.
 Videatur *Borellus*, ut et *Etmullerus* “ Agaso quidam dormiens Pisauri super
 “ duobus croci saccis, eadem nocte interiit. Ex *Amato*.” *Hoffman* 202. Yet
 it does not hurt dogs: and mice seem to be very fond of saffron roots. —6.
 Saffron inwardly taken dyes the urine. (*Bocrb. Chem.* ii. 246:) and even the
 foetus in utero also. *Amatus Lusitanus* (Curat. cent. 5. f. m. 71.) refert mulie-
 “ rem quandam, ab epoto medicamento, cui crocus admixtus esset, duas puel-
 “ las ab extra coloris lutei, peperisse: et coloris causam ipsi croco attribuit,
 “ signo desumpto, quod color lotura aquæ disparuerit . . . Canem sceminam,
 “ trium vel quatuor septimanarum gravidam sumpsi, cui toto reliquo gestatio-
 “ nis tempore tam cibum quam potum croco tinctum exhibui, donec octo
 “ forsan dies ad partum superessent, ubi ultimis tribus diebus etiam ad zij. zijj.
 “ croci jusculis addidi . . . secta in cane tota abdominis regione, ut et utero
 “ et placentis, colliquamentum non exiguo colore croceo tinctum viscebatur.
 “ . . . In catellis albidiores cutis particulæ plenarie croceo colore tinctæ
 “ fuerant . . . Quo modo vero chylus albicans, nec croco tinctus, in vasis
 “ lacteis, per mesenterium dispersis, se visui obtulerit, altioris est indaginis, &c.
 Vide *Hertod.* p. 278. In a moderate dose it cheers the spirits, invigorates na-
 ture, eases pain, and disposes to sleep: but taken in too great a quantity it in-
 toxicates, causes head-aches, heaviness, deliriums, profuse laughter, convulsions,
 death, if testimonies are to be credited. “ Vim habet crocus concoquendi,
 “ emolliendi, leviter astringendi et urinas ciendi. Elegantem colorem præf-
 “ tat, crapulamque arcet, ex passo bibitus . . . Venerem quoque stimulat . .
 “ Aiunt etiam exitiosum esse, si zijj. pondere ex aqua bibatur . . . Cæterum
 “ et ipsius radix ex passo pota urinas movet.” *Dioscorides* l. c. “ Papave-
 “ ris succus, et myrrha, et styrax, et crocus, hæc si largius bibantur, quædam
 “ dementant, quædam mortem inferunt: verum convenienti quadam mensura
 “ aliis admixta, adjuvant.” *Galen. Simpl.* l. 5. c. 19. p. 37. C. “ Vidimus (in
 “ quit *Amatus in Dioscor.*) mercatorem, qui cum plures croci sarcinulas emis-
 “ set, multum ex illo in ollam, carnes jurulentas pro coena continentem injecisset, post
 “ earum esum, in tam intensum et vehementem risum incidisse, ut non multum
 “ abfuerit, quin risu et cachinno e vita discesserit. Simile exemplum est apud
 “ *Jul. Alexandr. in Salubr.* Nos, ait, nobilem sceminam Tridenti vidimus, hora-
 “ rum circiter trium spatio, immodico risu concuti, eliciendorum forte mensium
 “ causa, justo plus croco usam. Dubium non est, si plus croci sumpsis-
 “ set, aut debiliores fuisset, mortui essent.” *Hoffman.* p. 201. *Homerus* (*Iliod* §. v.
 347.) “ describens concubitum Jovis et Junonis, tellurem finxit produxisse va-
 “ rios flores venereos, et inter hos crocum.” *Ibid.* p. 202. From what is said,

does it not appear more than probable, that saffron rarifies the blood, or relaxes the fibres, and agreeably tickles, rather than stimulates the nerves? That its operation is analogous, in some measure, to that of ambergrise, generous wines, yea, and in part of opium itself? Hence it is so much commended by *Bontius* (*Med. Ind.* 23.) in the dysentery, *tanquam specificum medicamentum et præstantissimum*. “*Putoque, says he, verissimum hujus morbi, sæpe etiam venenati, antidoton esse extractum croci,*” in which he found even an infusion of rhubarb in a decoction of tamarinds hurtful. But since saffron is “*adeo seclusæ naturæ, ut prorsus referri vix queat ad aliquod notum rerum genus, simulque possideat pulcherrimas nec aliunde imitabiles virtutes;*” as *Boerb.* well observes, and its extract with sp. vini, “*quasi nova species materiæ quam vix oleum, spiritum, gummi, resinam, gummi-resinam, appellare possumus;*” sed prorsus singulare quid, ad oleosum spirituosum pertinens,” (*Vide Boerb. Chem.* ii. 244.) No wonder its primary or most physical action be not easily determined. And, — 7. It is also commended in apoplexies, palsies, cough, consumption, pleurisy, cardialgia, colics, fluxes, hæmorrhages, &c. but in some of these at least it seems rather hurtful.” “*Ob vires quas in omnibus fere morbis curandis præstat insignes, a nonnullis panacea vegetabilis insignitur.*” *Heffman in Schrod. Mang.* p. 400. “*Tanti crocum fecere chemicorum principes, ut aroma philosophorum appellarint, perque primas literas vocabularum atroph.*” *Vide Boerb. Chem.* ii. proc. 65. p. 244.) Who calls the “*Extractum croci essentialiale, verum Paracelsi atroph.*” — “*Corroborat quoque crocus cor, thoracis crudos humores ad concoctionem perducit, pulmones aperit, et ab obstructione expedit, et ad hæc tam efficax remedium, ut subinde phthificis in summo vitæ discrimine, et propemodum animam agentibus, spiritum reducat et vitam ad aliquot dies proroget, ℥ss. aut ad summum ℥i. cum passo aut vino dulci, exhibitus.*” *Dod.* 213.

Quæritur, Do the virtues of saffron depend most on its action on the fluids, or on the nerves?

“*Crocus analysi chymica spiritum acrem exhibet tenuem et summe volatilem, qui primo prodit in distillatione, licet parva quantitate; deinde phlegma subacidum, cum heliotropii tincturam rubro colore inficiat; perparum olei cum salis volatilii urinosi tantillo. Nonnihil salis alcali fixi ex capite mortuo lixivii ope extrahitur Solutioni croci superaffusum oleum tartari, nullam mutationem affert: sed aqua calcis colorem album contrahit, cum levissima effervescentia, tenuique coagulo, ratione acidi in croco delitescente.*” *Geoff.* ii. 284. *An imaginary analysis.*

S E C T. III.

Saffron may be given in substance to ℥i. tho' ℥ss. is seldom exceeded: and the tincture to ℥ss. which contains the tincture of ℥i. The extract to gr. xii. — Saffron is an ingredient in the spiritus lavendulæ compositus, tinctura balsamica, tinctura opii, elixir pectorale, elixir proprietatis, E. p. cum acido, tinctura sudorifica, pulvis contrayervæ compositus, pulvis ad partum, confectio alkermes, electuarium cardiacum, Mithridatium, theriaca utraque, pilulæ rufi, pilulæ pacificæ, pilulæ pectorales, trochisci cypheos, trochisci hedychoi, & emplastrum oxycroceum.

“ Legi apud peritissimos quosque si detur in vino dulci, calido actu, croci tenuissime pulverisati ʒß. aut ad summum ʒi. ut *Dod.* habet (quamvis cernarius etiam ascendat ad 3ß) consistere intra salutis terminos . . . Sed quæ est illa dosi a qua periculum est ? Mihi distincte nihil compertum est. *Dioscorides* quidem, *Serapio*, *Avicenna*, *Constant. Africanus*, omnes ex aliorum sententiæ, scribunt ʒiij. interficere. At *Jul. Alexandrinus* ʒiij. habet. Inquit enim, quadrantis pondere potum, nimis effusum parit gaudium, &c. Quod quia ab experientia nova pendet, relinquo in medio.” *Hoffman* p. 201. Sect. 19. & 23. “ Veruntamen apud *Polonos*, teste *Etmullero*, adeo familiaris est usus croci, ut eum ad ʒi. sæpe cibus suis immisceant. Sed quid consuetudo valeat, ex opii usu diuturno satis liquet. Itaque croci substantia a ʒß. ad ʒi. & ʒi. tuto præscribi potest. Tinct. dosi a gut. iv. ad xx. Extractum exhibetur a gr. ii. ad x.” *Geoff.* ii. 287.

The *Lond. Pharm.* has no tinctura croci, but a vinum croceum, made by infusing saffron in canary; of which is made syrupus croci also. Our tincture is drawn with French brandy, and keeps better. I have it 20 years old, and still very good. There is no need of rectified spirit, nor ol. tartari here; much less for distilling the tincture. We have no extract.

L E C T U R E LVI.

C U S C U T A.

S E C T. I.

1. *Cuscuta, cassytha, cuscuta major. Officin.* *Cuscuta major. B. P.* 219. *T.* 652. *R. Syn.* 281. *Cuscuta. Park.* 10. *R. H.* 1903. *H. Ox.* iii. 615. *Cassutha, Dod.* 554. *Cassuta, five cuscuta. J. B.* iii. 266. *Cuscuta five cassutha. Ger.* 577. *Cuscutæ species. Linnæi Gen. Pl.* p. 53. *Dodder. vulgo Hellweed, and Devi's-guts.*

2. *Epithymum, cuscuta minor. offic.* *Epithymum, five cuscuta minor. B. P.* 219. *R. H.* 1904. *Epithymum. Tab. Ic.* 357. *Ger.* 577. *Cassutha minor. Dod.* 544. *Cuscuta minor. T.* 652 *Dodder of thyme.*

These are not specifically different, yea scarcely can be called different varieties, being bigger or smaller, according as the plant is on which they grow; and so they are reckoned one and the same plant by *Park. J. B. Morison, &c.* *Mr. Ray* indeed leaves it as uncertain.

It is an annual, parasitical plant; which though propagated by its seed, sown in the earth only, yet unless it be so near another that it can twist itself about it, soon dies. “ Experimentum *Tragi* affero et *Penæ*, qui cuscutam videre natam semine suo e terra, postea vero, ut plantæ suæ insinuavit, arescente, radice ex qua exstiterat, alimentum cepisse inde. Ego quantumvis diligenter inquisiverim, nunquam potui invenire radicem, quæ terram contingeret.” *Hoffman* p. 211. “ Verum ex accuratatione observatione *D. S. Dale*, radices, quæ longæ sunt, et fusci coloris, non ita statim intereunt; imo, ut ei videtur,

“tur, non intereunt omnino, sed plantam ipsam propagant : quamvis verum
 “si ex Parkinsoni, et nostra observatione, si semen in fictili feratur, emergere
 “quidam plantulam, sed brevi radicius perire, si non sint in propinquo stirpes
 “quibus irreat : unde procul dubio, aliquam saltem alimenti sui partem inde
 “exugit.” *R. II.*

It is found on flax, and on it only have I seen it growing in our country ; elsewhere also on nettles, hops, bramble, tares, hyssop, thyme, &c. It has no leaves, but slender, thread-like stalks, which stick fast to the bark or skin of the plant it grows on by means of little rough papillæ, which insinuate themselves into it, penetrate its vessels, and receive the nourishing juice they pour out. (*Vide T. Hist.* p. 426.) It is controverted whether the dodder growing on one plant differs in qualities from that of another. Whether it partakes of the virtues of the plant that supports it ; what plant carries the best, and which is to be taken when simply cuscuta is ordered. I think them all alike, in the same climate. It is found in plenty on the thyme about Paris ; yet what is used there is brought from the Levant, and in the shops called *epithymum venetum*. *T. l. c.* — *Parkinson* p. 111 says, that dodder which groweth upon tares, being the most frequent about London, and wherewith the markets are only in a manner furnished, the apothecaries shops are stored from thence. “The dodder of thyme is brought to us from Leghorn and Turkey.” *Miller Bot.* p. 187. Here no use is made of either : nor are they named in our dispensatory.

“*Epithymum flos est thymi durioris, et satureiæ (θυμίσσα) similis ; capitula
 “autem habet tenuia et levia, caudas spargentia quasi capillaceas.*” *Dioscor.* l. 4. c. 179. p. 316. “*Alvum purgat epithymon qui est flos e thymo, satureiæ
 “simili. Differentia, quod hic herbaceus est, alterius thymi albus : (Dalecamp.
 “legit, quod hoc herbaceum est, alterum vero thymum album :) quidam hip-
 “popheon vocant Quidam aliter epithymum tradunt sine radice nas-
 “ci tenui similitudine pallioli, rubens, (rather tenue similitudine pili). Plin.* l. 26. c. 8. p. 654. l. 21. “*Epithymum Dioscoridi & Plinio Cuscuta,
 recentioribus Græcis καρύθα, quam aliqui androsacen Dioscoridis l. 3. c. 150.
 (234.) alioqui cadytam Theophr.* 2. caus. 3. & *Plinii* l. 16. c. 44. esse volunt.
 Sed ad orobanchen *Theophr.* 5. caus. 22. referri potest. *B. P.* 219.

S E C T. II.

They are probably detergent in some degree, or resolvent, and so deobstruent. The cuscuta is called splenetic ; the epithymum a melanagogue ; and both are commended in obstructions of the hypochondriac viscera, and atrabiliarious diseases.

“*Cuscuta floret Junio, Julio, Augusto. Officin. Nat. Folia, seu herba tota
 “villosa, cum floribus, præcipue lino adnata. Vires. Splenetica imprimis est,
 “hinc epatica. Calfacit 1. siccatur 2. abstergit, subastringit, aperit, melan-
 “cholicum humorem corrigit, utilis in scabie, ictero nigro, obstructionibus
 “epatis ac lienis. Præp. Aqua stillat. ex tota planta.*” *Schrod.* 578. It is among the roborantia, siccantia, excitantia, antiscorbutica in rachitide propria, in *Boerb. Lib. de M. M.*

“ Epithy-

“ Epithymum. *officin.* integra planta. *Vires.* Purgat blande melancholicos et serofos humores; calfacit et siccat 3. *Usus præcip.* in scabie, ulceribus afeftibus melancholicis, in hypochondriorum et lienis passionibus, et obstructionibus. *Præpar.* Syrupus de epithymo.” *Schrod.* 765. Cuscuta et epithymum purgandi vim adeo debilem obtinent, ut eorum usus plane obsoleverit. “ Rectius inter aperientia medicamenta, quæ affectibus melancholicis et hypochondriacis conveniunt; sicut et scorbuticis, a *Cl. T.* reponuntur.” *Geoff.* iii. 388.

For, 1. I have tasted several samples of them, and they were almost all insipid, only a little musty at first; yet they increased the saliva. They have no proper scent: the epithymum creticum of the Dutch shops had a little of the flavour of thyme, which may be easily given to any of them. Indeed none of them appeared to be recent, and how old they were I know not. “ Cuscutæ flores sapore insigniuntur acri.” *J. B.*—2. Cuscutæ haud recentis thea was of a brandy-colour, and almost insipid; but after four days maceration, it seemed to have somewhat of the flavour of castor. It only diluted syr. violarum, and reddened very little a tinctura heliotropii. A solution of vitriol gave it a dark brown colour, and precipitated slowly a little of a greyish sediment: So that it is scarcely subastringent. “ Cuscuta seu epithymum est planta singularis . . . Saporis acris et subastringentis.” *Geoff.* iii. 386. — 3. Anally chymica ex cuscutæ recentis floridæ lbv. prodierunt humores lbiv. 3v. 5ij. gr. xviii. (of which 319. were fere insipidi deinde subacidi; 47 (fere) were intensely acidi; and the last three ounces, humoris intense acidi, deinde sale volatili urinoso copioso imprægnati;) olei adiposi 3i. 3iiiß. carbonis 3vii. 3i unde cinerum 3x. gr. xii. ac inde salis fixi alcali, 3ß. gr. 2. (ergo terræ 3v. gr. xxxiv.) et jactura fuit 3ij. gr. xviii.” *Secundum Geoff.* iii. 387. who adds, “ Cuscuta itaque abundat sulphure et sale essentiali tartareo subastringente.” — 4. Mr. *T.* found by experience that the epithymum venetum did not at all purge. “ It is rather stomachic and aperitive.” *Hist.* 427. Epithymum dua habet vitia, tarde purgat, et acrimonia sua nitrosa lancinat ventriculum.” *Vide Hoffman* p. 26. “ Massaria etiam flatulentiam timet.” *Ibid.* And — 5. Authors differ as to the dose. “ Tam variat dosis quam in ullo alio: *Mesue* quidem imponit a 3v. ad 3xx. Ego cum Massaria, contentus esse velim 3i. . . Syrupus de epithymo oportet dari ab 3iv. ad vi. Ita enim manifeste purgat: 3ij. tumultum cient tantum.” *Hoffman* l. c. Some make the dose to 3ij. others to iv. vii. xii. &c. *Vide S. Paulli* doses. “ Præscribitur a pug. i. ad ij. vel. iij.” *Geoff.* iii. 388.

In *Lib. de internis affect.* attributed to *Hippocrat.* epithymum is ordered as a purgative. *Fæf.* p. 536. lin. 53. but in *Lib. 2. de morbis mul.* p. 641. l. 32 as a diuretic. “ Epithymum potum cum melle deorsum purgat phlegma et bilem atram, privatim utile melancholicis et inflatis acetabuli mensura, ad 3iv. cum melle, sale, et aceti exiguo.” *Dioscor.* l. iv. c. 179. p. 316.

C Y A N U S.

C Y A N U S.

S E C T. I.

Cyanus, cyanus minor, battifecula. *Offic.* Cyanus segetum. *B. P.* 273. flore cæruleo. *T.* 446. Cyanos. *J. B.* iii. 21. *R. H.* 321. *Syn.* 198. Cyanos flos. *Dod.* 251. *C. vulgaris.* *Lob.* 296. *Ger.* 732. *C. minor vulgaris.* *Park.* 482. *C. segetum, vulgaris, minor, annuus.* *H. Ox.* iii. 134. *Papaver heracleum* Theophrasti et Dioscoridis. *Col. Phyt.* 93. *Centaurea, calycibus ferratis; foliis linearibus, infimis dentatis, superioribus integerrimis.* *H. Cl.* 422. Common blue-bottles.

It is very common among the corn; flowering in June and all the summer, and some part of the autumn. Wild it is always blue here: but culture has produced a great variety of colours in this flower: *T.* names 16 or 17 varieties, as different species. “Si in hortis colatur, non solum erit cæruleus, sed purpureus, remisso vel intenso colore, violaceus item & varius; & rursus flos simplex vel plenus.” *Baub. Matth.* p. 391.

The leaves and flowers are reckoned medicinal, but seldom used. It is omitted in *Pb. Edinb.*

“*Plinius* (l. 21. cap. 8.) de vestium æmulatione cum floribus agens, ait, in nomine est et cyani color: & (cap. 11.) rosam cyanus excipit, cyanum amaranthus. At *Hermolaus* leucoium Dioscoridis censuit: & *Cæsalpino* struthium apud Theophrastum ex hoc genere videtur: *Lobelius* num chondrillæ species sit dubitat.” *B. P.* “In Italia violis succedit rosa: huic intervenit lilium: rosam cyanus excipit: cyanum amarantus. Nam vinca pervinca semper viret, &c.” *Plin.* l. 21. c. 11. p. 550. l. 34. “*Battifecula, sive baptifecula, officinis olim dicebatur, que vox Hermolao a Latino derivata videtur, nimirum a batuo, sive bato, verbo antiquo, quod percutere et tundere significat, unde Anglicum beat; & ficula, i. e. falx, a fecando dicta, unde Anglicum sickle; a percutiendo et remorando messorum falces.*” *R. H.* 321.

S E C T. II.

It is deterfive, deobstruent, and diuretic; called cooling and astringent; and commended internally in obstructions of the viscera, jaundice, dropsy, contusions, &c. also in putrid and inflammatory diseases, &c. and externally for sore eyes, erysipelatous inflammations, ulcers. *An purgat?*

Officin. Flores. *Vires.* Frigefacit, et siccatur 2. astringit. Utilis in oculorum inflammationibus, rubedine, lippitudine, doloribus; in hydrope propinant. “*Præpar.* Aqua stillatitia, ex floribus.” *Schrod.* 579.

For, 1. The herb is of an herbaceous, somewhat disagreeable and bitterish taste; the flowers are more insipid; but neither has any smell. “Saporem est tota planta sicco, et aliquatenus nauseoso, odore nullo eccellente.” *J. B.* “*Analyti chymica flores cyani præbuerunt plurimum phlegmatis acidi, subausteri, aliquantulum spiritus urinosi, non mediocrem olei spissi ad instar extracti*”

“tracti portionem, nonnihil salis alcali fixi et terræ. Flores perparum odoris spirant, et sapore subastringente donantur: unde salem essentialem vitrioli-tartareum obtinere videntur, multo cum oleo permistum.” *Geoff.* iii. 390. Who analysed it? Certainly not the Academy: this is not their style. I know none else who would be at the pains; and I cannot help suspecting that all the analyses whereof he gives so compendious an account, (for he seems not much to study brevity,) are imaginary, or conjectural, though he seldom owns it.—2. Foliorum et summitatum vel herbæ thea is of a straw colour, and herbaceous subviscid taste, leaving behind it somewhat of the relish of artichokes. It only dilutes syr. violarum et sol. heliotropii. Oleum tartari makes it smell urinous: and sol. vitrioli gives it a dirty brownish-black colour; and soon precipitates a dark greyish sediment. Hence it appears to be antacid, ammoniacal, and subastringent. The tea made of the blue floſculi, had nothing of their colour, and made no change on a solution of vitriol, but gave an orange tincture to spirit of wine. “Flores in sp. vini, aut etiam aqua communi macerati, suo eam colore imbuunt; itemque saccharo elegantem colorem communcant, cujus usus omni periculo vacat.” *R. H.* Iteretur experimentum. Do acids turn the flowers red? Yes, vinegar and sp. vitrioli do it.—3. The juice, infusion, but especially the simple distilled water, called in France (See *Lemery, Chomel, Geoffroy*) *L'eau de casselunette*, are much commended for inflamed, sore, or weak eyes. “Succus ex flore expressus et bene depuratus, resolvit omnes oculorum inflammationes, sæpius hoc pro collyrio utor . . . dolendum est quod hi flores tam raro usurpentur, nec in officinis habeantur.” *B. Hist. Pl.* p. 204.—4. It is said to be purgative. “Tragus says seminis ʒʒ. purges pretty well.” *T. Hist.* p. 192. “Tribuunt cyano plerique vim refrigerandi, siccandi, adstringendi & repellendi, non secus ac plantagini. Ideo usus est aquæ destillatæ in oculorum inflammationibus incipientibus. Erysipelatis etiam inspergitur pulvis ex floribus una cum capitibus factus. (ad putrida ulcera valet succus instillatus.” *R. H.*) “Hoc scopo dicunt æstus febriles restinguere, putredini resistere, contagium compescere, et nescio quæ alia facere Laudant experimentatores etiam in venenis araneorum, scorpionum et aliorum ἰσχυλῶν, in palpitatione cordis, in suffocatione uterina, &c. Quæ si vera sunt, oportet cyanus partium sit heterogenearum. Amaror enim, qui satis evidens est, ut et acredo in foliis, non frigidum sed calidum testantur. Vis etiam illa penetrandi et deobstruendi, manipulo ejus decocto in cervisia, vinove, in hydropo, ictero, in iis qui ex alto delapsi sunt, aut contusi, et quacunque de causa sanguinem concretum intus habentibus, contrarium suadet. Sed neque vis purgandi aquas, compertissima mihi ex longo usu, alio tendit.” *Hoffman* p. 175. Do cattle eat it? I have not observed it eaten. But according to the Pan Suecus (*Amæn. Acad.* ii. p. 257.) comeditur a bobus, capris et ovibus.

It may be used in substance, powdered, to ʒij. in infusion or decoction to ʒʒ. The *eau de casselunette* is distilled from the flowers, cum propriis calycibus, macerated first in snow water for twenty-four hours, according to *Geoff.* iii. 390.

D I C T A M N U S.

S E C T. I.

Dictamnus. Dictamnus creticus. *Offic.* Dictamnus creticus. *B. P.* 222. *Park.* 27. *R. H.* 537. *H. Ox.* iii. 357. D. Cretica, seu vera. *J. B.* iii. 253. Dictamnium verum. *Dod.* 281. Dictamnium creticum. *Ger.* 797. Origanum creticum, latifolium, tomentosum; seu dictamnus creticus. *T.* 199. Origanum foliis tomentosis, spicis nutantibus. *H. Cliff.* 304. Dittany of Crete.

It grows in Candy, Sardinia, &c. in gardens; and flowers in July. The leaves are used. This plant was very famous among the ancients, and celebrated by Hippocrates, Aristotle, Theophrastus, Cicero, Virgil, Dioscorides, Pliny, Galen, &c. "Videtur απο τς τικτην, eo quod, ut *Dioscorides & Theophrastus* δζυτοκον ἐστι cum non modo potum, sed appositum quoque partus defunctos ejiciat: δικταμον," *Theophr.* 9. *Hist.* 16. *B. P.* "Insolens est etymologia et longe petita, απο τς τικτην: vera autem quasi, δικτης θαμνος, frutex Dictæ, montis Cretæ." *Hoffman.* 215.

"Dictamnon Cretæ insulæ proprium est, vi mirabile, et ad plura perutile; sed ad partus mulierum potissimum pollet. Folio pulegio simili constat, nec sapore ab simile est. Ramuli tenuiores sunt. Usus foliorum, non ramorum nec fructus est. Valent ad multa, sed præcipue ad difficiles partus mulierum ut dictum est. Aut enim facile posse parere faciunt, aut certe dolores penitus sedant. Dantur bibenda ex aqua. Rara est herba. Locus enim qui fert, exiguus admodum est, eamque capræ depascunt, capescendæ causa voluptatis. Verum etiam quod de telis fertur, affirmant. Capras enim sagitta transfixas, dictamo devorato telum ejicere." (*Theophr. Hist.* l. 9. c. 16. p. 1130.) Canit *Virgil. Aen.* l. 12. v. 411.

"Hic Venus indigno gnati concussa dolore,
 "Dictamnium genetrix Cretæa carpit ab Ida,
 "Puberibus caulem foliis, et flore comantem
 "Purpureo: non illa feris incognita capris
 "Gramina, cum tergo volucres hæfere sagittæ."

"Dictamnium (δικταμνος η). quod sylvestre pulegium aliquibus appellatur, herba est Cretensis, acris, lævis, pulegio similis: at majoribus lanuginosisque foliis, ac lanosa quadam veluti pube obductis. At neque florem, neque semen profert. Præstat vero omnia quæ fativum pulegium, sed efficacius multo. Nam non potum modo, sed et appositum et suffitum, partus emortuos ejicit. Aiunt et in Creta capras tela quibus ictæ sunt, hujus herbæ pastu excutere, &c. *Dioscorid.* l. 3. c. 37. p. 188. "Fervens et acre gustu." *Plin.* (l. 25. c. 8. p. 638. Vide lin. 22. &c.) Who also says, l. 27. "Dictamnium enim minima portione accendit os. See *Ballon. Obs.* l. 1. c. 13. p. 20.

S E C T. II.

It is acrid, aromatic, attenuating, diaphoretic, and diuretic; called uterine and alexipharmic; and commended chiefly in hard labour and other female diseases, also in the bites and stings of venomous creatures, and (pestilential) malignant fevers.

“*Officin.* Folia. *Vires.* Uterina imprimis est herba et alexipharmaca: calfacit, siccatur, attenuat, abstergit, aperit. *Ufus præcip.* in obstructis mensibus, in partu accelerando (intrinsecus et extrinsecus) in ictibus venenatis, in spiculis extrahendis.” *Schrod.* 583. Acre aromaticum est in *Boerb. lib de M. M.*

For, 1. It is of an acrid aromatic taste, and strong fragrant smell. It does not soon spoil, though age certainly weakens it; and it is so little used now, that it can seldom be found in the shops tolerably recent. “Folia sunt odoris validi, saporis acris.” *J. B.* “Folia odore fragrante nec ingrato donata; sapore acri, aromatico, fervido. . . . Folia odoris jucundi, saporis deurentis, et acerrimi Dictamnus oleo essentiali uberrimo, cum sali volatili conjuncto, donatur, ut ex odore et sapore conjicere licet.” *Geoff.* ii. 272. 3. 4. Here no analysis is offered. “Odoris sunt fortis et grati aromatici, sicut et saporis.” *Nucl. Belg.* 102. — 2. It was much commended and used by *Hippocrates*; especially in womens diseases (*Vide de Morb. Mul.* l. 1. p. 608. lin. 47. p. 619. l. 7. p. 623. l. 16. and 35. p. 626. l. 26. &c.) and called sometimes simply dictamnus, and sometimes dictamnus Creticus. “Hoc et menses detrahit, et secundas ejicit. Dictamnus Creticus oboli pondere ex aqua potui exhibeto. Quo epoto si secundas ejicere non potes, &c.” (*Lib. de Nat. Mul.* p. 571. l. 3.) and since him by all the ancients. “Tria habet dictamnus Cretica valde insignia. 1. Extrahit infixam corpori, non imposita tantum, sed succo etiam exhibito, simulque vulnus solidat. Hoc docuerunt vel capræ, vel cervi, vel hirci. *Arist.* 9. *Hist.* 6. *Plutarch* in *Gryllo.* *Plin.* l. 2. c. 8. and l. 8. c. 27. *Bellon.* 1. *Obs.* 13. 2. Partum mirifice accelerat simulque dolores lenit. 3. Venenis non minus quam theriaca resistit: hinc usus ipsius in peste.” *Hoffman.* 126.

S E C T. III.

It may be given in substance to $\mathfrak{z}\mathfrak{i}$. in infusion to $\mathfrak{z}\mathfrak{i}\mathfrak{j}$. It is an ingredient in the mithridatum, theriaca, and diascordium; in which last it is omitted in the *Ph. Edin.* ed. 1744. though preferable to several of those retained.

“Exhibetur ejus pulvis a $\mathfrak{z}\mathfrak{ss}$. ad $\mathfrak{z}\mathfrak{i}$; infusum vero in vino a $\mathfrak{z}\mathfrak{i}$. ad $\mathfrak{z}\mathfrak{ss}$.” *Geoff.* ii. 274.

L E C T U R E LVII.

E L A T I N E.

S E C T. I.

Elatine, veronica fœmina. *Offic.* Elatine, folio subrotundo. *B. P.* 252. *Park.* 553. Elatine mas, folio subrotundo. *J. B.* iii. 372. Veronica fœmina. *Dod.* 42. Veron. fœmina *Fuchsii*, five elatine. *Ger.* 625. Linaria, hirsuto folio subrotundo, flore ex herbido flavescente. *H. Ox.* ii. 503. Linaria, elatine dicta, folio subrotundo. *R. H.* 759. *Syn.* 282. Linaria segetum, nummulariæ folio villoso. *T.* 169. Antirrhinum foliis alternis ovatis. *H. Cliff.* 353. Round-leaved female fluellin, or speedwell.

It grows among the corn, flowering in July or August, in England. "It grows in corn fields, seldom flowering till the corn is cut down. There is another species of elatine which is as frequent as the last, and differs from it only in the leaves." *Miller's Bot.* 184. This other species is the elatine, folio acuminato, in basi auriculato, flore-luteo. *B. P.* 253. Elatine fœmina, folio anguloso. *J. B.* iii. 372. E. altera. *Ger.* 625. E. folio acuminato. *Park.* 553. Linaria hirsuto folio acuminato, in basi auriculato. *H. Ox.* ii. 503. L. Elatine dicta, folio acuminato. *R. H.* 759. *Syn.* 282. L. Segetum, nummulariæ folio, aurito et villoso; flore luteo. *T.* 169. Antirrhinum, foliis alternis, hastatis. *H. Cliff.* 353. Sharp-pointed female fluellin.—"Inter segetes, et in arvis demessa segete, cum priore, a qua parum differt." *R. Syn.*

"Elatine folia habet helxinæ, at minora rotundioraque, pilosa: ramos tenues, dodrantes, quinos senosve, a radice statim foliis refertos gustu acerbis. Nascitur in segetibus et cultis. Folia cum polenta imposita, inflammatis fluxioneque infestatis oculis auxiliantur. Cocta vero herba sorbitionis usu dysenteriam sistit." *Dioscor.* l. 4. c. 40. p. 258. And this is all he has of it. Of the helxine he says, "Foliis est hederæ at minoribus. *Ibid.* c. 39. Vide *Plin.* l. 27. c. 9.

I find it not in Hoffman, Schroder, (except the elatine Brunf. which is hederæ terrestris) Nucl. Belg. Quincy Ph. Leidenfis, &c. nor is it marked as medicinal in Boerh. Index. Yet it has a place in the *London M. M.*

"Elatine. Sunt elatines folio subrotundo, aut etiam folio acuminato. *C. B.* pin. folia . . . Amaricante sapore." *Boecleri Cyn. M. M.* contin. 2^a. p. 271. But the first only is in the *Ph. Lond.* viz. folia.

S E C T. II.

It is bitter, and probably an attenuating diuretic; called vulnerary and astringent: and is recommended for foul ulcers, scrophulæ, leprosy, cancers, both internally and externally used; also for the gout, dropsy, dysentery, &c.

“ *Elatine Dioscoridis*; veronica *foemina Fuchsii*, adstrictoriæ non modo facultatis, merito dysentericis, tumoribusque fervidis prodest; verum etiam tantum sit hodie ad cancos, carcinomata; malique humoris ulcera, ut eventus superet, aut temeret fidem. Nasum qui decreverant abscindere perdocti medicum complures, præceperantque ejusdem sententiæ chirurgis valde exercitatis id faciendum, quidam miscellus barbitonsor, qui de quopiam suo hero eximio medico hanc dotem didicisset, dissuasit: hujus litu et potu effecit, ut nec nasus abscindendus foret, et ut reliquo corpori in lepram prono optime esset: amaricant folia astringuntque, siccitate non exasperante.” *Lob. Adv.* p. 197. “ Succus herbæ expressus, ejusve aqua destillata, tum intro assumpta, tum exterius applicata, ulcera serpentia et cancrōsa cohibet, et perfecte sanat.” *R. Syn.* 283.

“ *Linaria segetum*, nummulariæ folio villosa.” *Inst.* 2. b. The leaves are very bitter, a little styptic, and smell somewhat oily. They redden but little the blue paper: whence it may be conjectured that their salt comes very near to the natural salt of the earth, united to much sulphur and earth. It is vulnerary, sweetening, detergent: it purifies the blood, and repairs the balsam of life, which consists in a sulphur modified by an acrid salt. Cæsalpin valued it for the king’s-evil and leprosy. For the cancer, gout, tetters, leprosy, and dropsy, succi ℥iij. or aquæ stillat. ℥vi. must be taken twice a day. A tincture is drawn with sp. vini; or an extract prepared, the dose whereof is ʒi. An ointment made of the expressed juice of the leaves, first macerated 24 hours in white wine, and hog’s lard is good for ulcers, hæmorrhoids, scrophulæ, and all the diseases of the skin. *T. Hist.* p. iii. He quotes also from Pena and Lobel. And *Geoffroy* almost only translates him, except in what follows.

“ *Analyti chymica ex totius plantæ recentis* ℔v. prodierunt humoris (primo subacidi, dein magis ac magis acidi, tum intense acidi, the last ʒix. being only impregnated sale vol. urinoso copioso) ℔iv. ʒi. ʒijss. olei ʒvi. gr. xlii. carbonis ʒix gr. xlii. unde cinerum ʒvi. ʒiss. ac inde salis fixi salis ʒijss. (ergo terræ ʒv. ʒvii.) et jactura fuit ʒiv. ʒvi. gr. xviii.” (*N. B.* Here are wanting gr. vi. of ℔v.) “ *Elatines folia* intense amara sunt, subastringentia, et aliud quid oleosi spirant. Salem essentialem continere videntur tartareo-alumino-sum, mediocri olei portione involutum. Summe vulneraria est, temperans et detergens, aperit et resolvit. Ejus infusum, decoctum, vel aqua destillata usurpari solent ad ʒiv. vel vi. Succus vero ab ʒiij. ad ʒv. bis terve de die. Laudatur in cancro, podagra, &c. (as in *T.* but he leaves out the tincture). . . . Utiliter quoque a nonnullis in enematum decoctis adversus alvi profluvia et dysenteriam usurpatur.” *M. M.* iii. 420.

I have not had occasion yet to examine or make any experiments with this species. But probably it does not differ from the elatine *foemina folio anguloso*. *J. B.* in virtues. For, 1. It is of a nauseous, bitter taste, and rancid smell; I can discover no stypticity in it. — 2. *Herbæ thea* is of a brownish yellow colour, perhaps tastes like the herb, and smells also rancid, somewhat like old linseed oil. It reddens a little the solutio *heliotropii*. A solution of vitriol does not make it black, but more opaque; and ol. tartari somewhat more yellow. The mixture with vitriol precipitates little; and spirit. vitrioli turns it only a little paler. In a word, the change made on this infusion by these mixtures is but small. Hence I think it not improbable that this plant is emollient,

emollient, detergent, diuretic, and, if given in such quantities as Mr. *Geoffroy* says the other is, purgative. Would not succi ζ iv. vomit?

The *mel elatines* was first introduced into the *London Dispensatory* in 1721. and it is retained in the newly reformed one: it is made ex succi elatines depurati m. lbiv. Mellis despumati P. lbiv. coctis ad debitam spissitudinem. Surely if in making it, the apothecary picks the leaves from the stalks, he obeys the college to his own cost, and little to the advantage of the medicine. "I have never known this (viz. mel elatines) used in any intention what-ever." *James Pharm. univers.* p. 704. And Dr. *Hill* says elatine is little used at present. "Honey of fluellin is very rarely made use of, and not often kept in the shops." *New Dispensatory*, p. 447.

E Q U I S E T U M.

S E C T. I.

Equisetum, cauda' equina, hippuris. *Offic.* *Equisetum* palustre, longioribus fetis. *B. P.* 15. *T.* 533. *E. majus* aquaticum. *J. B.* iii. 728. *H. Ox.* iii. 621. *E. majus.* *Ger.* 1113. *R. H.* 128. *Syn.* 130. *E. majus* palustre. *Park.* 1200. *Hippuris* major. *Dod.* 73. *Equisetum* fluviatile. *Fl. Lap.* 310. *Cauda equina* et *equisetum* majus. *Offic.* *Dale* 62. Great marsh or water horsetail.—*Vel* *equisetum* arvense longioribus fetis. *B. P.* 16. *T.* 533. *Park.* 1202. *R. H.* 128. *Syn.* 130. *H. Ox.* iii. 621. *E. minus* terrestre. *J. B.* iii. 730. *E. segetale.* *Ger.* 1114. *Hippuris* minor. *Dod.* 73. *E. arvense.* *Fl. Lapp.* 309. *Cauda equina* minor, et *equisetum* minus, *offic.* *Dale.* 62. Corn horsetail. "Varii est generis. Est enim *equisetum* palustre varium, est sylvaticum, est pratense, est denique arvense. Et hæc etsi viribus convenient, attamen usuale magis est pratense. Dicitur *equisetum* longissimis fetis. *B. P.* No. 8." *Schrod.* 586. The herb of any of these may be used.

These are generally thought to be the hippuris, and hippuris altera *Dioscor.* l. 4. c. 46. & 47. p. 260. Vide *Bod. in Theophr.* p. 458.

S E C T. II.

It is called astringent, and vulnerary; and commended in wounds and ulcers of the guts, reins and bladder, scabie vesicæ, &c. in powder, in decoction, plaister, &c. also in fluxes and hæmorrhages. But I know not what it is good for, if it be good for any thing in medicine.

"Vulnerarium est, frig. sic. 2. inspissat, astringit. Usus præcip. in hæmorrhagiis sistendis, in exulceratione et vulneratione renum et vesicæ, interneorum tenuium, &c. *Præpar.* Aqua stillatitia." *Schrod.* 586.

1. It is of an herbaceous taste, and as it were drying; and of a faint smell. It is neither bitter, acrid, nor astringent; at least the corn horsetail: nor does tea made of it blacken much a solution of vitriol. "Tota planta aspersa (aspera) est sapore impense siccante." *J. B.* iii. 730. "*Equisetum* majus aquaticum. *J. B.* iii. 729. Presse is of an herbaceous, saltish, deterfive taste, and scarce

“ at all reddens the blue paper By a chymical analysis, it yields several acid liquors, little oil, no volatile salt, a little of an urinous spirit : its fixed salt does not easily dissolve in the air ; neither gives it an orange colour to a solution of corrosive sublimat.” *T. Hist.* p. 267. Here are “ *plu- fleurs liqueurs acides.*” And the registers of the R. Acad. are quoted. “ *Analyti chymica ex herbæ equiseti majoris Hb. prodierunt humoris limpidi, odoris et saporis herbacei, subsalsi Hbiv. Zij. humoris limpidi subsalsi, et obscure austeri Zi. gr. xlvi. humoris rufescentis turbidi, sale vol. urinoso copioso imprægnati, 3xv. gr. liv. olei zij. carbonis 3vii. zij. unde cinerum Zijjß. Zijjß. ac inde salis fixi salis ziv. gr. xv. et jactura in distillatione fuit Zij. zi. gr. lxvi. Equisetum saporem herbaceum subsalsum refert : chartam cæruleam vix mutat. Sale ammoniacali donari videtur, cum multa terra adstringente, et exigua olei portione permixto.*” *Geoff.* iii. 434. Here is no acid liquor. And *T.* gives it a salt like that of coral mixed with a little sal ammoniac only : but here is an astringent earth without an acid.—2. It is said to be hurtful to black cattle. “ *Notatu dignum quod Pechlinus (obs. medicis) refert, equisetum astringentem et aluminosam herbam, ubi inter gramina a bubus decerpitur, succo fermentante alvum vehementer turbare, pinguedinemque vel detrudere, vel prohibere.*” *Geoff.* iii. 436. though it has not such effect on the rein-deer. Goats eat it ; but sheep seldom. Vide *Pan. Suec. Amæn. Acad.* ii. p. 261.

“ *Obtuli circa autumnum redeuntibus ex longo itinere rangiferis fasciculum fœni, et observavi eos hanc plantam (equisetum fluviatile), seligere et adsumere, et reliqua fere intacta relinquere.*” *Fl. L.* p. 310. Hoc (viz. equisetum idem) rura nostra in cibum assumunt, jejunii quadragesimalis tempore. “ *Etenim illud prius elixant, mox farina superspergunt, et oleo in sartagine frigunt, manduntque piscium vice. Ex quo cibo alvus quandoque eorum adeo constringitur, et constipatur, ut in coli cruciatum facile incurrant.*” *Matth.* p. 726. Surely this could not be the effect of its astringency. Claret wine is much more astringent, and yet how liberally is it guzzled down without such consequences. Yet — 3. Horsetail is commended much in the dysentery, hæmoptoes, ulcers of the lungs, phthisis, malignant fevers, &c. “ *In ἀτρυγία viscerum emplastrum ex eo factum mirifice confortat. Ita quoque oleo adstringenti incoctum et illitum toti abdomini. In diuturnis febribus, etiam malignis, miracula fecisse cum aliis comperi.*” *Hoffman.* p. 218.

“ *Alios ejus exhibendi modos contra vomitum sanguinis, et dolores ventriculi, contra rupturas, contra calculum, urinæ stillicidium, &c. Vide apud C. Baubinum.*” *R. H.* 128. viz. *Theat. Col.* 252, 3, 4. where are plenty of authorities for its wonderful virtues. “ *Scabiei Vesicæ* (says he, from Amatus in Dioscor.) malo intolerabili medetur, et biliosum vomitum constringit.” *Ibid.* col. 253. Diutina experientia compertum est, inquit *Ammonius*, (*Medic. herbar.* p. 95.) scabiei vesicæ mederi. Nam unico hoc medicamine testatur lithotomum insignem hanc scabiem penitus profligasse, decoctiones illius ægroto propinandas porrigendo.” *Geoff.* iii. 436. *Job. Agricolæ Ammonii medicinæ herbariæ libri duo* were printed *Basilæ* 1539. in 8vo. *Lind.* 513. in 12mo. *Seguier.* p. 4.

S E C T. III.

It has been given in powder to ʒi. in decoction to ʒij. or ʒβ. the juice to ʒij. It is one of the useleſs ingredients of our emplaſtrum deſenſivum.

E R Y S I M U M.

S E C T. I.

Eryſimum, irio. *Offic.* Eryſimum vulgare. *B. P.* 100. *T.* 228. *H. Ox.* ii. 218. Eryſimum, *Tragi*, floſculis luteis, juxta muros proveniens. *J. B.* ii. 863. *E. Dioſcoridis Lobelii.* *Ger.* 254. *E. irio prima.* *Tab. Ic.* 448. Irio, ſive eryſimum. *Dod.* 714. *Lob.* 103. I. ſive eryſimum *Dioſcoridis Adv.* 69. I. ſive eryſimum vulgare. *Park.* 833. *Eruca*, ſiliqua cauli appreſſa; eryſimum dicta. *R. H.* 810. *Eruca hirsuta*, ſiliqua cauli appreſſa; eryſimum dicta. *R. Syn.* 298. Eryſimum, ſiliquis ſcapo appreſſis. *H. Cliff.* 337. Hedge-muſtard.

It grows by the way ſides, walls, and rubbiſhy places, flowering all the ſummer. The herb is uſed. But the ſeed ſeems to have been the part chiefly uſed by the ancients. In Dioſcorides, Galen, Paulus, the *ἐρυσιμον* recommended is the ſeed. In Hippocrates, the eryſimon, and *ἐρισυμ καρπος* are commonly the ſame thing. *Officin.* Semen ac herba. *Schrod.* 587. *Dale* 203. *Pb. Lond.* ed. 1682. But *edit.* 1721. has herba only; and in the laſt edition the herb is ſent after the ſeed; and moſt juſtly.

“ Eryſimon circa urbes, domorum areas, hortosque naſcitur, foliis erucae ſyl-
“ veſtris, cauliculis in lori modum ſequacibus et flexilibus, floribus luteis, ſili-
“ quis in cacumine corniculorum figura et gracilibus, uti ſceno græco, quibus
“ exigua concluduntur ſemina, naſturtii ſimilia, fervidoque guſtu.” *Dioſcor.* l. 2. c. 188. p. 153. The etymons I think ſomewhat ſtrained. Vide *B. P.* and *Bod.* in *Theophr.* p. 921.

S E C T. II.

The herb agrees in virtues with burſa paſtoris; and the ſeed with ſemen naſturtii. It is ſaid to be a pectoral; and is commended in coughs, hoarſeneſs, aſthma, &c.

“ Calfacit et ficcat 3. attenuat, aperit, expeſtorat. *Uſus præcip.* in mucila-
“ gine contumaci pulmonum, atque tuſſi chronica. Extrinſecus in cancro non
“ exulcerato, tumoribusque renitentibus mammarum. *Præp.* Syrupus de ery-
“ ſimo *Lobelii.*” *Schrod.* 587. Herba antacida et acris; ſemen ſtimulans aromaticum, alcaleſcens, et antiſcorbuticum acrius, in *B. Lib. de M. M.*

The leaves and flowering tops taſte like the leaves and tops of ſhepherd’s purſe: the ſeed is more biting. It has little ſmell. It is alcaleſcent, and its acrimony volatile. “ Radix acris et rapæ ſapore: folia ſapore oleraceo: “ ſemen fervidum.” *J. B.* “ It has an herbaceous, ſomewhat ſaltish and

glutinous

“ glutinous taste ; it reddens considerably (*assez*) the blue paper ; hence seems
 “ to contain a salt resembling sal ammoniac, &c. *T. Hist.* p. 19. The virtues
 are commonly transcribed from the ancients.

“ Semina . . . cum melle delinēta, contra thoracis fluxiones, purulentas ex-
 “ crationes, tusses, icterum, et ischiadem efficacia sunt. Bibitur et semen con-
 “ tra venena . . . Cæterum ad eclegmata redditur mitius, et accomodatius, si
 “ aqua maceratum torreatur, aut linteo illigatum, subactâque farinâ oblitum in-
 “ alletur.” *Dioscor.* l. c. Who commends it also outwardly for occult cancers,
 parotides, inflammationes testium et mammarum. In a word, folia rapæ are
 every way as good as folia erysimi ; or, if you please, folia brassicæ will do
 as well.

“ Analyti chymica ex foliorum et summitatum erysimi vulgaris lbv. pro-
 “ dierunt humoris (all alkaline or urinous) lbiv. 3vi. 3vij. gr. lxvi. olei 3vi. gr.
 xlvi. carbonis 3iv. 3v. unde cinerum 3ij. 3v. gr. xlii. ac inde salis fixi mere
 “ alcali 3i. gr. xviii. (ergo terræ 3i. 3v. gr. xxiv.) et jactura fuit 3iijß. gr.
 xxx.” Secundum *Geoff.* iii. 445. who adds “ Foliorum sapor herbaceus est,
 “ subsalsus, et aliquantisper glutinosus. Chartam cæruleam succus rubro co-
 “ lore tingit, licet analyti chymica parum acidi (not a word of acid in it) præ-
 “ beat. Salem essentialem contineri videtur ammoniacalem, cum multo
 “ phlegmate, sulphure, et terra involutum.” *Videatur!*

“ Erysimi decocto multos colico dolore laborantes curavit *Riverius*, quod
 “ etiam ex vino efficacissimum est remedium.” *R. H.*

E U P A T O R I U M.

S E C T. I.

Eupatorium cannabinum. *Offic.* Eupatorium. *Avicennæ vulgo.* Eupato-
 rium cannabinum *B. P.* 320. *T.* 455. *Park.* 595. *R. H.* 293. *Syn.* 179. E.
 adulterinum. *J. B.* ii. 1065. E. cannabinum mas. *Ger.* 711. E. cannabi-
 num vulgare foliis trifidis, profunde dentatis. *H. Ox.* iii. 97. Vulgare hepa-
 torium *Dod.* 28. Eupatorium, foliis digitatis. *H. Cliff.* 396. Dutch or hemp
 agrimony.

It grows by ditches, river sides, &c. flowering in July. The herb, or leaves
 and flowers are used, but seldom. It is uncertain whether it was known to
 the ancients or not. It is neither the eupatorium of the *Greeks*, nor, (which is
 the same) of *Avicenna*. It is called herba S. Kunigundis, by *Trag.* & *Tab. B. P.*

S E C T. II.

It is detergent, deobstruent, diuretic and subastringent also ; called vulnera-
 ry, and hepatic ; and is commended internally in obstructions of the viscera,
 jaundice, dropsy, scurvy, &c. and outwardly for scorbutic ulcers, swellings of
 the legs, and the like.

“ *Officin.*

“*Officin.* Flores, & folia, sed raro. *Vires.* Calfacit & siccit. Saporis est amariusculi, attenuat, aperit, subastringit. Epatica est et vulneraria. *Usus præcip.* in cachexia, catarrhis, & tussi, mensibus retentis. Extrinsecus e nobilissimis est vulnerariis (ut & intrinsecus). Menses ciet, balucatione, &c. *Præp.* 1. Aqua, ex fol. & floribus. 2. Trochisci de eupat. A.” *Schrod.* p. 587.

1. It is of a pretty bitter and subastringent taste, and somewhat aromatic smell. “Caulis gratum & aromaticum odorem, cum inciditur spirat; folia sunt sapore amaro; & radix non absumili cum foliis gustu.” *J. B.* “The leaves are very bitter, and do not redden the blue paper: it is very probable that the natural salt of the earth has undergone no other change in it almost, but of being united to much sulphur and earth.” *T. Hist.* p. 194. “Tota planta odorem habet gratum & fortem, saporem amarum acrem; radix fortiore habet odorem.” *Nucl. Belg.* 100.—2. Foliorum thea is pretty deeply tintured, like old Canary; is pretty bitter, and somewhat rough to the taste, and smells somewhat aromatic: it reddens very little, yet observably, the blue paper: solutio vitrioli turns it instantly opaque, and to a greenish-footy-black colour, precipitating soon and plentifully. Ol. tartari made it darker, greenish, and less transparent, and it smelled somewhat urinous: and mixed with spirit. vitrioli, the infusion became paler, and more transparent.—3. *Gesner* found the roots emetic; *Chomel*, that a decoction of them neither purged nor vomited hydropic persons. “Eupatorii aquatici, vel Avicennæ quorundam, radicis fibras (earum pugillum, *R. H.*) in vino nuper decoxi, bibi colatum, unde per horam post alvus urinaque copiose motæ sunt, & vomitus postea duodecies fere, pituita quam plurima evacuata, multo tutius et facilius quam ab helleboro fiat.” *E. Gesner. Epist.* p. 63. *T. Hist.* p. 193. “Nihilominus tamen D. Chomel refert, in plant. usualium historia, decoctum radicum ʒj. in vini ʒviii. hydropicis (se?) propinasse, absque ulla per vomitum vel secessum evacuatione. Unde quæso horum experimentorum diversitas?” *Geoff.* iii. 454.—4. It is not a little commended for internal, as well as external ulcers, rheums, cachexies, agues, chloroses, diseases of the skin, &c. “In Belgio rustici feliciter icterum curant, hujus plantæ decocto.” *D. Regemorter. in M. S.* In Nosocomio cuidam intestina corrosa, ita ut per foramina stercorea exirent, jam prope desperato, coaluerunt decocto eupatorii cannabini cum vino parato, & poto & ulceribus infuso.” *Velsch. Obs.* 44. *R. H.* “Externe folia & summitates floridæ in vino cocta, & tumoribus œdematosi admota, eos resolvunt; scroti præsertim tumores aquosos & hydroceleum absque punctione sanant.” *Geoff.* iii. 454.

“Analyti chymica ex foliorum recentium ʒv. prodierunt humoris ʒiv. ʒix. ʒij. gr. xii. (all obscurely acidi, or manifestly acidi, except the last ʒx.) Salis volatilis urinosi ʒj. gr. viii. Olei ʒij. gr. xxx. Carbonis ʒiv. ʒv. unde cinerum ʒj. ʒvi. gr. xxiv. ac inde salis fixi falsi ʒiv. gr. lx. (ergo terræ ʒj. ʒiʒ.) & jactura fuit ʒijʒ. gr. xii.” according to *Geoff.* iii. 453. who adds, “Folia amara sunt, chartam cæruleam non mutant. Salem essentialem natro similem continere videntur cum multo sulphure, & terra copiosa permixtum. Hepaticum est, aperiens & vulnerarium, &c. . . Succus foliorum ad ʒiv. præscribitur. Extractum ex succo paratum ad ʒj. exhibetur.” *T.* gives

only 3ij. of the juice, vide *Boerb. Hist. Plantarum dictam* p. 175. where it is called *rusticorum panacea*.

E U P H R A S I A.

S E C T. I.

Euphrasia, eupragia offic. Euphrasia officinarum, B. P. 233. T. 174. H. Ox. iii. 430. Euphrasia, Dod. 54. J. B. iii. 452. Ger. 663. R. H. 771. Syn. 284. Eupragia vulgaris, Park. 1328. Euphrasia, caule ramoso, foliis ovatis, acute dentatis, Fl. Lap. 204. H. Cliff. 325. Eyebright.

It grows in plenty in pasture grounds, flowering from midsummer to autumn. The herb whilst in flower is used. The name sounds as if it were derived from *εὐφροσύνη*, though it seems not to have been known to the ancients. "Euphrasiam olim *εὐφροσύνη* dictam aliqui volunt, eo quod oculos, eorum caliginem discutiendo, deleat: hinc nonnullis ophthalmica & ocularia: quæ cum paulo supra ducentos annos inventa fuerit, veteribus indicta videtur. Forte hæc vox a Buglossa mutuata, quæ etiam *εὐφροσύνη* dicitur; quod eo modo quo Buglossa in vinum coniecta, animi lætitiā faciat, sic & euphrasia oculos juvet." B. P. "Factam esse vocem *ἀπο τῆς εὐφροσύνης*, nescio an ausim dicere. Veteribus ignotam fuisse concedo; sed longe vetustiore 200 annis. Clarigavit illam Matthæus Sylvaticus, qui vixit circa annum Christi 1320. Arnaldus Villanovanus, author est vini euphrasiati tantopere celebrati." Hoffman. p. 225. The passage cited from B. P. is also in his Phytopinax, where his words are, "Apud veteres nil de hac (euphrasia) invenitur, cum ea a ducentis tantum annis, vel paulo plus innotuerit." Phytop. p. 442. The Phytopinax was printed Basiliæ 1596, after the author had 20 years applied himself to botany. M. Sylvaticus died about 1340. Freind Hist. ii. 264. So Bauhinus may have written this in 1580; from which deducing 200, it is but about 40 years after Sylvaticus's death, which perhaps is the paulo plus, added by Bauhinus. However Arnoldus de Villa Nova, is somewhat older than Sylvaticus, for he died before the year 1313. Freind Hist. ii. 256. How long before him the euphrasia was in repute for diseases of the eyes I know not; but in Gordon's *Lilium Medicinæ* (published in 1305) among the medicines for the eyes, eupragia is one; and used both outwardly, in a compound distilled water, and inwardly in a syrup. Fol. 146. a.

I cannot but here observe that this Arnoldus de Villa Nova, was one of the greatest men of his age, not only a famous physician and chymist, but divine also, who had the courage to oppose not a few of the corruptions of the then clergy. On which account the faculty of theology at Paris, in 1309, took him to task. "He had vented his opinions a little too freely at Paris and in Arragon, particularly some, which reflected upon the monks and the mass: which so incensed the clergy, that the faculty of theology at Paris, in 1309, condemned 15 positions, which he had advanced; one of which was, that the works of mercy and medicine were more acceptable to God, than the sacrifice of the altar. Upon this account, and hearing at the same time that the Inquisition was proceeding against P. de Apono, he retired to Fre-

"derick

"derick of Arragon, King of Sicily and Naples." Vide *Fr. Hist.* ii. 251—257. He describes many chymical medicines, and among the rest the aqua euphragiæ, aqua vitæ, &c. in his *Breviarium Practicæ*: and in his book *De Vinis*, he highly commends vinum euphragiatum. Euphragia is not mentioned in the *Schola Salernitana*, compiled about the year 1100.

S E C T. II.

It is an attenuating, antiseptic, and subastringent vulnerary; called cephalic: and is recommended chiefly, for dim, weak, or sore eyes, and a bad memory; by some also for the jaundice.

"Ophthalmica est, & cephalica, calfacit, & siccatur 2°. astringit, discutit, faporis subacris. *Ufus præcip.* in oculorum suffusionibus, caligine, memoriæ debilitate. *Præp.* 1. Conserva, ex tota herba cum floribus. 2. Aqua, ex integra planta *Julio* collecta. 3. Vinum nonnullis usitatum est: sit infusione summitatum pro potu ordinario." *Schrod.* 588.

For 1. It is of a pretty bitter, and subastringent taste, without any proper smell. "Folia sunt saporis pinguis & subamari." *J. B.* "It is very bitter, and reddens a-little the blue paper; whence we may conjecture that the sal ammoniac, though envelop'd in much sulphur and earth, yet predominates in this plant." *T. Hist.* p. 194. — 2. Summitatum thea is of a deep old canary colour, not quite fine, pretty bitter, scarcely astringent, and of a fresh smell. It turns solutio heliotropii to a yellowish-red colour: oleum tartari makes it more opaque, saffron-coloured, and a little urinous-scented: and with solutio vitrioli it becomes opaque, of a dark greenish-brown, and precipitates slowly. — 3. It has been long reckoned a specific ophthalmic; and commended for dim, weak and watery eyes, for inflamed and sore eyes, for cataracts, &c. yea it is said to make old eyes become young again, and the blind to see. "*F. Hildanus, Cent. Epist.* 103. tantam esse, ait, euphrasiæ in imbecillitate visus vim atque efficaciam, ut ejus usu septuagenarios quosdam, propter vigilias & studia plurima amisso visu, in decrepita ista ætate, eum recuperasse observaverit." *R. H.* 772. "R Macis ʒβ. euphrasiæ ʒij. f. pulv. subtilissimus. Dosis, factis debitis evacuationibus, ʒij. Valet ad Scotomiam & imagines. *Maroidus* pulverem Doctoris *Helidæi* appellat. *Dodonæus* semen fœniculi & saccharum addit. *Fuchsius* in suffusionibus & cataractis commendat." *Ibid.* "*Arnoldus* auctor est fieri ex euphragia vinum vinemixtæ tempore, cujus usu, senum etiam oculi rejuvenescere feruntur, auferri que omne oculorum impedimentum, visusque defectionem, præsertim puita, crudisque humoribus redundantibus. Ego certe, inquit *Tragus*, Argentinensem euphrasiam, morbo arquato utilissimam comperi, vino decoctam ac calidam ægro propinatam." *J. B.* "Euphragiam decoctam in vino, maximopere contra icterum flavum utilem deprehendi, casu a me inventam, id quod nemo adhuc observavit." *Hoffman.* in *Schrod. Mang.* p. 412. *Is Tragus nobody?*

"Vino autem, cui multa euphrasia injecta fuerit, quantumvis magnopere commendetur a multis, non perinde fidendum: ut cujus potu tantum trimestri in Helvetia usum socium et commilitonem nostrum, meminimus pene

“ ambobus orbatum oculis, & fluxionibus modo non oppressum : quum dun-
 “ taxat antea levi cataphora & lachrymaliunculis laboraret. Quare pulvere,
 “ aut decocto, citra vinum tutius utetur quis.” *Lob. Adv.* 210.

“ Analyfi chymica, ex totius plantæ floridæ recentis lb v. dempta radice,
 “ distillaverunt humoris, fere inodori, saporis herbacei, obscure acidi, dein
 “ manifeste acidi magis ac magis, ac tandem austeri, lb iv. 3j. 3v. gr. lx.
 “ humoris sale vol. urin. copioso impregnati 3ij. gr. xxiv. olei 3ix. gr. lx.
 “ carbonis 3vi. 3v. unde cinerum 3j. 3vi gr. xxiv. indeque salis xxi alcali 3iv.
 “ gr. l. (ergo terræ 3x. gr. xlvi.) & jactura fuit 3iv. 3ij.” *Secundum Geoff.*
 iii. 455. who adds, “ Folia amara sunt: eorum succus chartam cæruleam
 “ colore purpureo leviter tingit. Salem essentialem obtinent tartareo-ammo-
 “ niacalem, cum sulphure copioso, & multa terra conjunctum.”

S E C T. III.

It may be given in powder to 3j. or 3ij. in infusion to 3ß. the juice to 3j. or 3ij. and repeated once or twice a day: the aqua stillat. ad libitum. The herb bruised is recommended to be applied to the eyes; and the juice, or aqua stillat. to be dropt into them, in inflammations of that organ, dimness of sight, &c. We have no preparation of it. Some use it in tea.

The aqua stillatitia is certainly a safe collyrium; and the plant, especially used frequently in the manner of tea, may do service in some diseases of the eyes, agreeing much with the other mild antiscorbutics, and vulneraries. But whether there is any specific ophthalmic virtue in it may be doubted. “ In aqua infusa, & per aliquot dies pota, visum acuit, nam omnes humores reddit pellucidos. Sapore non differt a veronica mare, & puto esse ejusdem virtutis.” *Boerb. Hist. Pl. dicta* p. 317.

FOENICULUM. *Vide* Roots.

F U M A R I A.

S E C T. I.

Fumaria, fumus terræ, *offic.* Fumaria, *officinarum*, & *Dioscoridis*. *B. P.* 143. *T.* 422. Fumaria, *Dod.* 59. F. vulgaris, *J. B.* iii. 201. *Park.* 287. *R. H.* 405. *Syn.* 204. F. purpurea, *Ger.* 1088. F. vulgaris, latifolia; filiquis cur-
 tis, non bivalvibus, *H. Ox.* ii. 261. Fumaria, pericarpis monospermis, *H. Cliff.* 352. Common fumitory, Fumisterrie.

It is common among corns, as well as in gardens, flowering all summer. The herb is used. In Greek it is καπνος, i. e. fumus. “ Capnos . . . clarita-
 “ tem facit inunctis oculis, delachrymationemque ceu fumus, unde nomen.” *Plin.* l. 25. c. 13. p. 645. *Dioscorides*, and *Galen Simpl.* l. 7. p. 49. F. give the same etymon, though apparently longe petitem. The appearance it makes in a dewy summer morning might perhaps have occasioned the name.

“ Capnos

“Capnos fruticosa est herbula, coriandri similitudine prætenera, foliis candidioribus, & cineracei coloris, undeque numerosis; flore purpureo. Hujus succus acris est, claritatemque facit oculis, & delachrymationem, ceu fumus; unde & herba nomen traxit. Illitus cum gummi duplicatos palpebrarum pilos evulsos renasci prohibet.” Cæterum herba, in cibo sumpta, copiosam bilem per urinas trahit, *Dioscorid.* lib. iv. c. 110. totum, p. 286. “Succus ejus oculorum aciem acuit, non paulum trahens lachrymarum velut ipse fumus: nam hinc ei appellatio indita.” *Galen. Simp.* l. 7. p. 49. G.

S E C T: II.

It is an attenuating, deobstruent, diuretic, called splenic, and hepatic; and is commended almost in every chronic distemper, especially such as proceed from obstructions in the viscera, scurvy, or internal ulcers.

“*Officin.* Herba cum floribus. *Vires.* Splenetica est, ac epatica; attenuat; serofos, biliosos, ac adustos humores sensim expurgat; viscera referat; re-ferata roborat; sanguinem purificat. Hinc *usus præcip.* in scorbuto, aliisque morbis mesenterii & lienis, in ictero, in scabie omnis generis, & similibus. *Præp.* 1. Aqua. 2. Oleum stillat. quod rarum. 3. Succus inspissatus. Dosis ad ʒj. 4. Conserva summitatum. 5. Syrupus simplex ex succo. 6. Syr. compos. 7. Pilulæ de fumaria purgant bilem serofosque humores. Dosis ʒj. ad ʒiʒ. 8. Sal fumarix ex herba incinerata.” *Schrod.* p. 593. Aperiens deterisivum ad ulcus pulmonum, scorbuticumque lenius est in *Boerb.* lib. de M. M.

1. It is of a nauseously bitter taste, and no smell: neither acrid, nor styptic. “Gustu toto est amara.” *J. B.* “Saporis est amari ingrati.” *Nucl. Begl.* 119. “This plant, though very bitter, reddens nevertheless the blue paper, just as does aloes: so it seems to contain much the same principles, viz. a salt like the natural salt of the earth, but wherein the sal ammoniac predominates over the nitre and sea salt: besides the salt of fumitory is conjoined with much sulphur and earth, and dissolved in a considerable quantity of phlegm. By a chymical analysis fumitory gives much volatile salt, much fixed alkaline salt, and much thick oil. All these principles render it laxative, diuretic, a purifier of the blood, and deobstruent: it passes for a specific in all the diseases of the skin, in hypochondriac melancholy, cachexy, and dropsy.” *T. Hist.* p. 82.—2. Herbæ thea is of a straw-colour, subviscid nauseous bitter taste, and fresh smell; becomes of a dark brownish-black colour, being mixed with vitriol: dilutes only syr. viol. gives no signs of an ammoniacal salt on the affusion of ol. tart. or aq. calcis, but long kept it becomes very fetid.—3. In a M. S. of *Albinus*’s it is said to be plenissima nitro, cui adhæret oleum acre. “Si chemice tractetur det crystallos, quæ nitrum referunt, & sunt vi-aperiente & refrigerante præditæ.” *Boerb. Hist. Pl.* p. 389. “Capnos,” says *Galen* l. c. acris simul & amaræ qualitatis est particeps; nec tamen plane expers est acerbæ.” *Avicen* and *Mesue* make it cold. *Hoffman* 30.—4. *Galen* says, “Urinam biliosam multamque provocat, sanatque jecinoris ob-structiones & debilitates,” and adds, “Plebeius quidam ea uti solebat ad stomachum roborandum, unaque ventrem lubricandum.” l. c. Vide *Aetii*, *Tetr.* 1. *Serm.* 1. col. 30. “In viscerum obstructionibus *Aetius* tantopere com-
“ mendat

“ mendat succum, ut dicat, semel quidem adhibitus, dolorem omnem adimit :
 “ ter autem præbitus morbum omnem radicitus tollit. Intelligo si in ea
 “ quantitate detur, ut purgare possit.” *Hoffman*, p. 30. See *Aetii Tetr.* 3.
Ser. 2. 2. *De opilatione hepatis*, p. 512. B. whose next remedy is hepar lupi.
 “ Facultas purgatoria an nota fuerit veteribus in dubio est. Sed ita est : co-
 “ pia doseos facit quo minus frequentetur. Sed & tum, cum justam dosin
 “ affecuti sumus non vehementer purgat. Est enim inter benedicta, si Mesuæ
 “ fides est. . . Sed quæ est dosis illa justa ? Sto cum illis qui aiunt mentem
 “ Mesuæ & Avicennæ esse, succum dari debere ab ℥v. ad ℥xi. Decoctum
 “ ad ℥xv. Pulverem ab ℥ij. ad ℥v. . . Conserva apud me in magna æstima-
 “ tione est, ad expediendas viscerum obstructions, post univérse purgationem.”
Hoffman, p. 31. — 5. It is much commended in the jaundice, vapours, spleen,
 cachexy, scabie and other diseases of the skin, quartan agues, dropsies, worms,
 &c. Yet it is excluded the *London M. M.*

“ Analyfi chymica fumarix floridæ, demptis radicibus, ℔v. præbuerunt
 “ humoris ℔iv. ℥v. ℥ij. gr. xlij ; Salis vol. urinosi ℔j ; Olei ℥j. 3vj. gr. xv ;
 “ Carbonis ℥iv. 3vß. unde cinerum ℥j. 3vij. gr. iv. ac inde salis fixi alcali
 “ 3iv. gr. xxx. (ergo terræ 3x. gr. xlvi.) & jactura fuit ℥iv. gr. xxvii.” se-
 cundum *Geoff.* iii. 500. who adds, “ Hæc planta intense amara est, & char-
 “ tam cæruleam rubro colore inficit. Sale essentiali donatur ammoniacali cum
 “ aliqua salis mirabilis Glauberi portione, & multo sulphure conjuncto.”

The juice, infusion, decoction, syrup, conserve, extract, and powder may
 be given ad libitum. “ Diuturnam coctionem non fert, ea enim sale suo
 “ volatile orbatur.” *Geoff.* iii. 501. Yet he says the extractum is non exiguæ
 virtutis. *Vide Lactuca.*

G A L E G A.

S E C T. I.

Galega, ruta capraria, offic. *Galega vulgaris.* *B. P.* 352. *T.* 398. *Park.*
 417. *H. Ox.* ii. 91. *Galega.* *Dod.* 548. *Lob.* 509. *Adv.* 392. *Ger.* 153. *J. B.* ii.
 342. *R. H.* 911. *Galega.* *H. Cliff.* 362. Goats rue.

It grows wild in Spain, Italy, &c. In our gardens it flowers in July. The
 herb is used ; but seldom, if ever, here. It is called by *Fracastrorius* ono-
 brychis, and herba Gallica, whence some derive galega. “ Verum galega
 “ Italica vox est, testibus Matthiolo, Dodonæo, aliis.” *R. H.* “ Galega cur
 “ dicatur ignoramus. Ruta ab effectu, non vero odore. Quidam onobrychin,
 “ alii glaucen, nonnulli polemonium, alii polygalam veterum esse judicant ;
 “ quibus Dioscorides descriptiones contradicunt,” *B. P.* “ Herba usus est
 “ apud Italos crebrioris ; apud nos vero rarioris.” *Geoff.* iii. 509.

S E C T. II.

It is diluent and resolvent ; called alexipharmic, and sudorific ; and is re-
 commended in the measles, small pox, malignant fevers, pestilence, poisons,
 bites of serpents, worms, &c. It may be used any way at pleasure.

“ Celeberrimum est alexipharmacum ac sudoriferum, venenum, imprimis-
 “ que pestilentialia, insigniter discutiens; *usus præcip.* in petechiis expellendis,
 “ aliisque morbis pestilentialibus, ipsaque peste curanda; in morbillis, in epi-
 “ lepsia infantum (exhibetur succi cochl. i.) in ictibus serpentum, in lumbrici-
 “ cis (quos etiam extrinsecus applicata fugat.) *N. B.* Herba hæc, secus ac
 “ alia, citra saporem est, & insuper qualitatibus primis temperata. *Præp.*
 “ 1. Aqua, ex integra planta Julio collecta. 2. Conserva, summitatum seu
 “ florum.” *Schroder* 595. It is one of the antiscorbutica leniora in *Boerb.*
Lib. de M. M.

1. There is nothing observable in the taste or smell, more than in other soft leguminous plants. “ Folia sunt sapore leguminaceo.” *J. B. R. H. Geoff.*
 “ Saporis leguminosi.” *Nucl. Belg.* 121. Foliorum thea is of the colour of old brandy; herbaceous, and a little bitter to the taste, and of a faint smell: ol. tartari does not make it fetid: it reddens a little a solutio heliotropii: and mixed with a solution of vitriol it becomes greenish, black, and opaque, and precipitates a dark-grey sediment. — 2. It has no malignant quality; neither any peculiar effect outwardly applied, so far as I can find. “ It fattens hens wonderfully, and causeth them to lay eggs more plentifully.” *Park.* 418. where it is said also to cure colic pains, but fried, and applied warm: and to stop gangrenes and spreading ulcers, the same way, or with vinegar. “ Ad lumbricos, aut succi cochlear i. dant, aut herbam in ol. amygd. amar. & sem. lini frixam abdomini imponunt, aut denique unguentum parant ex succo cum aloe, myrrha & croco. Hoc qui criminantur quod additis de- beatur effectus, non superficialiter sapiunt. Nam & solus succus facit rem.” *Hoffman*, p. 244. And—3. Though wonderful virtues are attributed to it, yet they seem not much to be credited; for it is little used in France, and not at all in Britain. “ Rustici, authore *Cæsalpino*, hujus succo, in os jumentorum, cum ob venenum depastum tument, infuso, sanant illa. Hinc fieri potuit, ut ad homines transferretur. Et confirmavit experientia. Qui enim viperæ venantur in Italia, ad confectiorem theriacæ, ut etiam illi, qui ostentant publice, si contingat illos morderi, nihil certius herba hac, nec præsentius habent multo magis freti illa quam decantatis theriacis, inquit *Pena*. Ea spe inducti, qui venenum in corpore humano gigni posse putant, dederunt feliciter in febribus petechialibus. . . Idem fit in peste. . . A peste fit ratio- cinium ad lumbricos. . . Ab his ad epilepsiam itur.” *Hoffman*. l. c. “ No- biliss. vir patriæ suæ decus, D. Robertus Boyleus, in tractatu de salubritate & insalubritate aeris, tres quatuorve paginas impendit, galegæ viribus ce- lebrandis, in pestilentialibus & malignis morbis, ex propria observatione & experientia; ut nos monuit D. Tancred. Robinson.” *R. H.* Vide *Boyle's Works*, vol. iv. p. 294. where he mentions only two infected persons, to whom he sent it, made up with a little sugar, in the form of a fine green conserve, who recovered; adding, “ But having made but these two trials, I dare not ground much upon them only. . . Some little experience has invited me to believe the commendations given it against the bites of venomous creatures.” *Schenkius* also gives an observation of its effect on inflamed lips occasioned by the poison of a viper, which is scarcely credible.

“ Analyfi chymica galega acidum phlegma copiosum, spiritus & salis con- creti urinosi aliquantulum, mediocrem olei, exiguum vero terræ portionem præbet..

“ præbet. Salem essentiallem continere videtur ammoniacalem, cum sulphure
 “ & terra adeo implicitum, ut mixtum mucaginosum constituat. (The vir-
 “ tues taken from *Schroder*, without naming him follow: then he adds)
 “ Estur cruda vel cocta; vel succus ad cochl. i. aut alterum exhibetur: in
 “ jusculis & apozematibus alexitericis ad M. i. præscribitur. Fabulam de
 “ duello lacertæ & viperæ a *Foresto* relatam, sedulo omisimus” *Geoff.* iii.
 609. His analysis is imagined, I believe. This fabula, or as *Forestus* calls
 it, pulcherrima historia de lacerta a vipera læsa, which he had from a *Medicus*
Bononiensis fide dignus, when he was studying in that university, is in short
 this: “ Once upon a time a certain old man walking by a river side, by
 “ chance espying a lizard fighting with a viper, threw himself on the ground,
 “ to see, but not interrupt, the combat. The sturdy viper gave the lizard a
 “ fore wound, she staggered as if dying, but recovering a little, crawled
 “ among the grass, unobserved by the viper, till she came to an herb grow-
 “ ing on the bank of the river, qua devorata vires extempore primas recu-
 “ peravit, atque denuo ad viperam se convertens, eandem non aliter quam
 “ antea adoritur.” She was again mortally wounded, and had recourse to
 the same remedy. Again she attacked and was wounded a third time. But
 the cruel, or too curious old man, during this last charge, having plucked
 the herb up by the roots, the lizard wounded returning to the place, but
 missing the remedy, “ statim occubuit, atque expiravit. Senex vero hujus
 “ herbæ vim expertus, medicis ea quæ viderat narravit.” He says the herb
 is called in Italy graliga or gralega, and well known in the shops; and
 “ contra venenum, vermes & pestem celebratur, forte veteribus incognita,
 “ quanquam nonnulli hanc galegam appellant, cujus fit mentio in Pandectis,
 “ sub finem.” Thus *Forestus* (qui obiit A. D. 1597. æt. 75.) De incerto &
 fallaci urinarum judicio, bb 2. c. 5. p. 208, 209. “ Ex tota planta florida
 “ contusa, & vino albo macerata per sex dies, aqua destillatur, cui eadem
 “ virtutes tribuuntur. Ab ʒj. ad iv. exhibetur.” *Geoff.* iii. 610. Its virtues
 are all from the wine: so that brandy is as good.

N. B. Opus Pandectarum Medicinæ, by *Matthæus Sylvaticus*, was published
 in 1317. Vide *Freind's Hist.* ii. 264.

G R A T I O L A.

S E C T. I.

Gratiola, offic. Gratiola centauroides. *B. P.* 279. Gratiola. *Dod.* 362. *Ger.*
 581. *J. B.* iii. 434. *R. H.* 1885. *G. vulgaris. Park.* 220. Digitalis, mi-
 nima; gratiola dicta. *H. Ox.* ii. 479. *T.* 165. Gratiola. *H. Cliff.* 9. *Gen. Pl.*
 25. *P.* 11. Hedge-hyssop, rather Water-hyssop.

It grows plentifully in moist places in Germany, France, and Italy. In our
 gardens it flowers in July. “ Gratiolæ, sive Gratia Dei nomen, recentior
 “ ætas tribuit, propter singulares vires, tam per superiora, quam per inferiora,
 “ humores expurgandi, & recentia vulnera consolidandi. Hæc veteribus in-
 “ dicta videtur, quamvis aliqui papaver spumeum Dioscoridis; alii Eupato-
 “ rium Mesues esse velint.” *B. P.* Geranium Robertianum, was the Gratia
 Dei,

Dei in the *Old London Pharmacopœia*. *Geranium batrachoides*, *Gratia Dei Germanorum*. *Lob.* The *chamæcistus vulgaris* is *Gratia Dei Gesner* (hort.) The *Lyfimachia cærulea*, *galericulata*, vel *gratiola cærulea*. *B. P.* is *gratia Dei Cæs.* according to *B. P.* 246. But according to *T. H.* p. 266. the *gratia Dei Cæs.* is our *gratiola*. All which are reckoned famous vulneraries in some place or other.

S E C T. II.

It is an acrid and violent purgative and emetic; said to evacuate watery, phlegmatic and bilious humours; and is commended internally in the dropsy, agues, jaundice, &c. “*Externe hydrocephalis medetur.*” *Herman. Cynos.* p. 540.

“*Officin.* *Folia. Vires.* Efficax remedium est in humoribus aquosis, lentis, biliosisque specificè evacuandis, quos vel ex remotissimis partibus trahit, atque tum per secessum, tum per vomitum expurgat. Hinc magnus ejus usus esse poterit in hydrope, ictero flavo, &c. Et quia amaritudine insuper dotata est insigni fugat lumbricos, eorumque saburram expurgat. Corrigitur cinnam. sem. anisi, glycyrrhiza, &c. Dosis foliorum pulv. ʒi. infusorum ad ʒij. *Præp.* Extractum, vel succus inspissatus. Dosis a ʒi. ad ʒß.” *Schrod.* p. 767. *Alcalescens* est, et *antiscorbuticum* acrius, in *Boerb. Lib. de M. M.*

For, 1. It is very bitter and nauseous to the taste, without smell. “*Tota planta insigniter amara est, et inodora, quadam cum obscura adstrictione.*” *J. B.* “*Tota planta inodora, insigni amarore donatur cum obscura adstrictione.*” *Geoff.* iii. 532. *Gratiolæ thea* is of a subacid, nauseous, and excessively bitter taste; only dilutes syr. violarum; reddens pretty much solutio heliotrop. and turns a solutio vitrioli to a greenish dark brown colour, and without occasioning a precipitation for a long time. — 2. It is very juicy, contains not much resin, yet loses little in drying. “*The expressed juice of this plant is not so bitter as is the residuum, nor so cathartic as a decoction of the same: which is true also of roses, peach-flowers, &c. gratiolæ viridis lbvß. well dried weigh but lb i. Water easily extracts its virtues. Gratiolæ lbiv. calcined yield of white ashes ʒiß. whence salis fixi ʒivß. may be got.*” See *Bolduc Mem. Acad.* 1705. p. 245. — 3. Outwardly applied it is said to consolidate wounds. I think it rather discutient in œdematous and other cold tumors, and detergent in foul ulcers. And 4. Inwardly taken its operation is so violent and harsh, that it is little used. Yet is commended for dropsies, quartans, gout, sciatica, cachexy, &c. And Mr. *Bolduc* says he found it an excellent vermifuge, infused in milk: and that rad. pulv. ʒß. is as good a specific for the dysentery as *ipecacanha*, when the disease is not gone too far on, being astringent as well as bitter. (*Mem. l. c.*) “*Non tantum per inferiora, sed et superiora purgat, et tam violenter, ut quidam helleboro comparent, quidam pityusæ. Purgat autem utramque bilem, pituitam crassam, tenuemque, et aquas Hydropicorum.*” *Hoffman.* p. 32. “*It is of a rugged churlish nature.*” *Mill. Bot.*

“*Analyti chymica ex gratiolæ floridæ lbv. prodierunt humoris lbivß. gr. ix. (of which the first ʒxv. were insipidæ et inodoræ fere, but subacidæ: all the*

“ rest, magis ac magis acidæ, the very last $\text{ziii}\beta$. being intense acidæ, and
 “ only aliquantisper alcali urinofæ.) olei zi . gr. vi. carbonis ziv . zvii . gr. xii.
 “ unde cinerum zi . $\text{ziv}\beta$. ac inde salis fixi alcali zv . gr. xviii. (ergo terræ zvii .
 “ xviii.) et jactura fuit zij . gr. xlv.” According to *Geoff.* iii. 531. who gives
 it a sal essentialis tartareo-vitriolicus cum multo sulphure acri et crasso.

S E C T. III.

It has been given to zi . in powder; to zij . in infusion or decoction; the juice
 to zi . and extract to zi .

“ Ad decoctum vel infusum, sumitur a zi . ad zij . conserva vel succus a zvi .
 “ ad zi . datur. Pulveris zi . Matthiolo sufficit. Qui extracto uti malunt, cum
 “ cinnam: in catapotia redigunt, in granis subsistentes.” *Hoffman* p. 32.
 “ Herba recens ad m. β . vel sicca ad zi . sed longe tutior ac mitior est, si cum
 “ lactis $\text{lb}\beta$. leviter incoquatur & colatura propinetur. Extractum cum vino
 “ paratum ad $\text{z}\beta$ vel zij . præscribitur: conserva vero ad zij . vel zijj . usurpa-
 “ tur.” *Geoff.* iii. 532. *Ill-proportioned doses!*

H E D E R A T E R R E S T R I S.

S E C T. I.

Hedera terrestris, chamæcissus. *Offic.* *Hedera terrestris vulgaris.* *B. P.* 306.
Park. 676. *H. Ox.* iii. 409. *H. terrestris.* *Dod.* 394. *Ger.* 856. *R. H.* 567.
Chamæcissus, sive *hedera terrestris.* *J. B.* iii. 855. *Chamæclema vulgare.* *B.*
J. 172. *Chamæclema.* *Cord. Hist. B. P.* *Calamintha humilior*, folio rotun-
 diore. *T.* 194. *R. Syn.* 243. *Glechoma*, foliis uniformibus crenatis. *H. Cliff.*
 307. Ground-ivy, gill-go-by-ground, alehoofe, or tunhoofe.

It grows commonly near hedges, walls, &c. flowering in April, and through
 the summer. The description of the chamæcissos in *Dioscorides* l. 4. cap. 126.
 p. 290. ill agrees to it. Vide *Hoffman*. p. 160. The herb is used. *Folia. Pb. Lond.*

S E C T. II.

It is an attenuating antiseptic, and diuretic vulnerary; called pectoral; and
 commended for coughs, consumptions, internal ulcers, gout, scurvy, obstruc-
 tions in the viscera, &c. It is reckoned an universal purifier of the blood, and
 a great cleanser of the urinary passages.

“ *Officin.* Herba cum floribus. *Vires.* Saporis est amari et acris, calfacit
 “ et siccat, vulneraria est, aperit, abstergit. Usus celeberrimi in tartaro tam
 “ pulmonum quam renum aliarumque partium, incidendo, resolvendo; adeo-
 “ que confert obstructionibus inde natis et ictero: conducit erosionibus et ul-
 “ ceribus viscerum abstergendis, consolidandis, &c. Extrinsecus adhibetur
 “ creberrime ad calculum renum resolvendum (in balneis) ad dolores colicos
 “ resolvendos (in clysteribus.) *Præp.* 1. Aqua stillatitia ex herba Maio
 “ collecta. 2. Conserva ex floribus summitatum. 3. Syrupus simplex, ex
 “ succo.

“succo. 4. Syr. compositus. 5. Succus. Succum propinatum plurimos a morte liberasse refert Hollerius.” *Schrod.* p. 600. “Acre aromaticum, aperiens deterisivum ad ulcus pulmonum, et antiscorbuticum lenius, est in *Boerb. Lib. de M. M.*”

1. It is somewhat aromatic, and bitterish to the taste; and smells pretty strong, resembling a mixture of calamintha and lamium. “Sapor plantæ amarus; odor gravis ad mentham quodammodo accedit, aut inter lamium et mentham ambigit.” *R. H.* “Totius plantæ sapor amarus, odor gravis ad mentham quodammodo accedit.” *Geoff.* iii. 542. “The leaves are bitter, a little aromatic, and redden not much the blue paper. Hence their salt seems somewhat to resemble tartar vitriolat, mixed with a very little sal ammoniac, but with much sulphur and earth.” *T. Hist.* 181. — 2. Herbæ thea is of a brandy-colour, tasting and smelling like the plant. It neither reddens the blue paper nor syr. violarum, but gives a red-wine colour to the solution of turnsole. Oleum tartari makes it yellow, gathers a cloud in it soon, and precipitates a whitish mucus. Solutio vitrioli turns it to a greenish black colour, and opaque, and precipitates a dark grey sediment, without becoming clear above.—3. It purifies and preserves malt liquors. “It is frequently put into ale, which it refines and clarifies; and great quantities of it are drunk in town under the name of gill-ale, being reckoned antiscorbutic, aperitive, and good to cleanse the ureters.” *Miller Bot.* 225. It is said to expell worms in horses; that the juice snuffed up cures the head-ach; and that a decoction of the herb makes a good gargarism for sore mouths and throats. “Hujus felicem usum observavi in expellendis vermibus equorum, si concisa detur cum avena.” *J. B.* iii. 856. “Succus naribus attractus, cephalalgiam etiam vehementissimam et inveteratam non lenit tantum, sed et penitus aufert. Medicamentum hoc auro æquiparandum. Novi quippe qui per decennium et amplius, acerrimis doloribus confictati, statim ab ejus usu recreati sunt, nec unquam postea paroxysmum senserunt.” (Ex *John Oldacres.*) *R. H.* The Dutch by repeated infusions of it in gin make a very balsamic tincture, which they value much in the gravel. Hence it is a mild aromatic bitter, subastringent, balsamic and antiseptic. It keeps well enough without being prepared *Dr. Willis's* way. Vide *Pharm. ration.* par. ii. sect. 1. c. 6. And hence, — 4. It is commended in all erosions and exulcerations of the viscera, consumptions, hectic fevers, contusions, gravel, mictus cruentus, aut purulentus, &c.

“Analysi chymica ex totius Plantæ recentis *Thv.* prodierunt humoris *Thiv.* *3i.* olei *3xi.* gr. xxxiv. carbonis *3iv.* *3viß.* unde cinerum *3ij.* ac inde salis fixi alcali *3vi.* gr. xxxviii. (ergo terræ *3ix.* gr. xxxiv.) et jactura fuit *3viii.* *3vi.* gr. xii.” Secundum *Geoff.* iii. 542. “Ob partes bituminosas, salino-terrestres, et spirituosas, aperit, abstergit, discutit et vulneraria est, tum intrinsecus sumpta, tum extrinsecus adhibita.” *Ibid.*

S E C T. III.

It may be given in powder, infusion, decoction, extract, juice, conserve, any way at pleasure. It is much used by way of tea. It is an ingredient in the syr. pectoralis.

“ Succus ejus defæcatus ad ʒij. aut iij. infusum vel decoctum ex aquâ vel
 “ vino propinantur: vel etiam pulvis a ʒß. ad ʒi. Ex summitatibus floridis
 “ conditum in officinis præparatur; sicut ex ejus succo syrupus et extractum.
 “ In decoctis et potionibus vulnerariis usus est frequentissimi.” *Geoff.* iii. 543.

H O R M I N U M.

S E C T. I.

Horminum, horminum hortense, sclarea. *Offic.* Horminum sclarea dictum.
B. P. 238. *R. H.* 543. Horminum sativum vulgare, sive sclarea. *Park.* 55.
H. Ox. iii. 392. Orvala. *Dod.* 292. Gallitrichum sativum. *J. B.* iii. 309.
 Gallitrichum, sive horminum. *Ger.* 768. Sclarea. *Tab. Ic.* 373. *T.* 179. Sal-
 viæ species *Linnaei Gen. Pl.* 30. p. 14. Common garden clary.

Where it grows wild I find not. “ Scarleam sponte nascentem, videre non
 “ memini.” *Clus. Hist.* ii. 28. “ Habitat in Græcia, Apulia.” *L. Sp. Pl.* p.
 24. It is common in gardens, flowering in June and July the second year
 after it is sown, being a biennial plant. The leaves are used. “ Folia cum
 “ floribus, sed raro.” *Schrod.* 603. “ Herba.” *Phar. Lond. Vet.* “ Herba,
 “ semen.” *Phar. Edinb.*

Horminum is said to come from ὀρμαίνω, cum impetu feror, sc. in vene-
 rem; quia ad venerem stimulat, ut Dioscorides loquitur. Sclarea or “ Scar-
 “ lea est a Germanico schärlach, qui color est coccineus, seu chirmesinus.”
Hoffm. 256. “ Ἀσκληρός, aridus.” *Lemery.* From sclarea comes clary; but
 from clarus, as if it were clear-eye, a clarificandis oculis. *H. Ox.* “ Gallitri-
 “ chum dicitur esse Galli crista, a florum similitudine . . . Apud Gallos in
 “ eam nominis celebritatem venit, ut or-vala, seu or-valla vocaretur, quasi di-
 “ cas auro contra valorosum. Item tout-bonne, tota bona.” *Hoffm.* 256-7. But
 that this is either the horminum sativum or sylvestre of the ancients I cannot
 assert. Vide *Theophr. Hist.* l. 8. c. 1. & 7. *Dioscor.* l. 3. c. 145. p. 232.
Plin. l. 18. c. 7.

S E C T. II.

It is stimulating, attenuating, diaphoretic, and diuretic; called uterine, and
 antispasmodic: and is commended in hysteric fits, colics, fluor albus, frigidity,
 &c. though little used here. The dose need not be determined, as it is a
 weak medicine.

“ Calfacit, siccatur, abstergit, attenuat. Usus rari, nisi quod in vino, cum flo-
 “ ribus sambuci et vitis suspendi soleat.” *Schrod.* 603. “ Est aperitiva, ce-
 “ phalica, stomachica, carminativa, hysterica, emmenagoga; partum adjuvat,
 “ et tormina post partum tollit. Cervisæ, cui ab aliquibus additur, attribuit
 “ vim egregie inebriandi; externe discutit.” *Nucl. Belg.* 264. *De his omnibus*
autem dubito: though

1. It is of a little-bitterish, and somewhat-aromatic taste; and strong, heady,
 or heavy, and as it were vinous smell. “ Odor totius plantæ vehemens et
 “ gravis;

“ gravis; sapor amarus.” *R. H.* “ Odoris est fortis et grati, fere instar lupuli, et saporis amari.” *Nucl. Belg.* 264. “ Folia odorem quasi citratum, acutum, vehementem, gravem tamen exhalant; gustu amara sunt et aromatica. Eorum succus chartam cæruleam parum mutat.” *Geoff.* iii. 590. But it is scarcely bitterish. — 2. Foliorum thea is of a brandy-colour, of a greenish or herbaceous taste, neither bitter nor aromatic: solutio vitrioli turns it of a greenish black, and opaque; and precipitates plentifully a dark grey sediment: and it reddens sol. heliotrop. but not blue paper. Cum galega convenit fere. — 3. It is said that infused in wine or ale, it increases their intoxicating quality. “ Semen *καριόφιαν*, capitivæ gravitatem facit odore, quem universa spirat, non tamen ingrato; eoque magni usus, quibusdam Septentrionalium, ad Zythi, Bieræque confectioem: Lupuli namque penuria, vel vegetioris potionis faciendæ causa, cortinis ferventibus addunt, sitque temetum, quo, non multis depletis poculis, temulenti fiunt, hilaritate propemodum insana.” *Lob. Adv.* 240. “ Ut calida est scarlea certo, ita sicca certo; verum cum magna vaporositate. Argumento sit, non cervisia tantum, sed et vinum, quod ab impostu tantum herbæ, plane Muscatellinum mentitur, et facillime decipit incautos.” *Hoffman.* 257. “ Horminum cænopolis Germanis imprimis innôruit, inquit Etmullerus, pro vinis suis adulterandis. Solent namque ex ejus floribus, cum floribus sambuci, per infusionem, vinum Rhenanum in Moschatellinum mutare.” *Geoff.* iii. 590. — 4. Externally it is discutient and anodyne. Herbæ pulvis sternutamenta provocat, catarrhum tollit et cerebrum purgat. Decocta in defessionibus utilis est ad trahendos menses, &c. *R. H.* “ Crato commendat in suffocationibus uteri et similibus affectibus unguentum ex sclarea, cum butyro et tacamahaca.” *Ibidem.* And — 5. Internally it is commended in obstructis mensibus, lochiis, hard-labour, grindings, sterility, impotency, &c. “ Schwenckfeldius (scribit) mederi epilepsiæ, et suffocationi matricis.” *J. B.* “ Nostrates folia ovis conquassatis, cum flore lactis et pauca farina perfusa, et in sartagine frixa pro placentis, mensis secundis inferre solent, et ad lumborum imbecillitatem commendant. Sunt sane ferculum palato satis gratum, quod ad renes corroborandos, et venerem stimulantam valere creditur.” *R. H.*

“ Analyti chymica, ex totius hormini floridi *℥iv.* demptis radicibus prodierunt humoris *℥iv.* *℥iv.* *℥ij.* *℥i.* *℥v.* gr. xxiv. carbonis *℥v.* *℥v.* unde cinerum *℥ij.* *℥vi.* gr. xx. ac inde salis fixi alcalini mere *℥vi.* gr. xxx. (ergo terræ *℥i.* *℥vii.* gr. lxii.) et jactura fuit *℥iv.* *℥ij.* gr. xii.” Secundum *Geoff.* iii. 589. “ Salem continere videtur (adds he) tartareo-ammoniacaem, cum multo oleo, tum tenui tum crasso, et terra consociatum.”

“ Semen oculis inditum utile esse traditur ad excutiendam eorum caliginem, et educenda corpuscula quæ in illos inciderunt. Quippe emollito humore oculi hujus seminis mucilagine, id quod in oculos illapsum est quasi obvolvitur, et cum semine tandem ejicitur.” *Geoff.* iii. 592. This effect of the seed is attested by Miraldus, Ambrose Paré, Hildanus, and others, and related by *J. B.* iii. 310. who seems to approve of it, as experientia multoties comprobatum, also by Mr. *R. (H. &c.)* But recommend it who will, I will not. Mr. *B. Gibson* told me he once made the experiment on himself, whether for dimness of sight, or to get out something like motes, I do not remember: but he found the remedy worse than the disease; for it gave him a great deal of

of pain, inflamed his eyes, and it was with difficulty he got it out again. The seed is indeed mucilaginous : and this makes it the more difficult to get it out, especially as it swells much very soon by moisture.

H Y P E R I C U M.

S E C T. I.

Hypericum, herba perforata. Offic. Hypericum vulgare. B. P. 279. T. 254. Park. 572. H. Ox. ii. 469. Flor. Lap. 223. Hypericum. Dod. 76. Ger. 539. R. H. 1018. Syn. 342. H. vulgare, sive perforata; caule rotundo, foliis glabris. J. B. iii. 381. Common S. John's wort. — "Hujus petala ad unum tantum latus punctis nigris notantur, atque crenata sunt." Notante D. Jussieu in MSS. Quod verissimum est.

It grows among bushes, in thickets, and hilly pastures, flowering in July. The herb, flowers, and seeds are used. "Folia et flores." *Schred. 604. & Ph. Lond. 11.* But the tops with the seed-vessels and seeds are preferable. The seed is very small, oblong, brown, and of a bitterish resinous taste, and pine-smell.

Hypericon Plinio, ὑπερίκον, Dioscoridi, ἡ ὑπερίκος. Nicandro in Alexiph. "Hyperici nominis rationem non invenio. *R. H. 1017.* "Nomen Græcum denotat quod ὑπερίκονας, super imagines et spectra dominium habeat: furga Demonum vocatur . . . A *Paracelso* solis terrestris nomine insignitur, &c." Vide *Osw. Crollius de Signat. p. 47.* It is commonly pronounced hypericum, and *Andromachus* favours this, "τοσσον δ' ὑπερίκω, τοσσον δ' ἐπιμισγεται ἀμύλη." Notante *Smetio.* Though *Bates, Shipton, Douglass,* make the *i* long. There are in *Dioscorides* l. 3. c. 171. 172. 173. & 174. four plants, viz. ὑπερίκον, ἀνδρομαχίον, & κωρίς, which *Hoffman* p. 261. thinks differ only in magnitude; and probably are species of the same genus. "Non aliter inter se differunt, quam ut genus et ejusdem species" says *Mr. Ray* of the first three, p. 1017. But whether our S. John's-wort is any of them, I think not so certain. "Perforata vulgo, quod folia soli objecta innumeris foraminibus scatere videantur: hinc et porosa quibusdam." *B. P.*

"Hypericum, alii Androsæmum, alii corion appellant: sunt qui et chamæpytyn, quoniam semen odore pineam resinam imitatur. Frutex est furculaceus, dodrantalis, rubescens, foliis rutæ; flore vero luteo, (Leucoio simili, *Orib.*) qui digitis tritus sanguineum succum remittit; qua ex causa etiam Androsæmum appellatum est; calyculis subhirsutis, in rotundo oblongis, hordei magnitudine, in quibus semen nigrum & resinosi odoris. Gignitur locis cultis et asperis." *Dioscor. l. 3. c. 171. p. 242.*

S E C T. II.

It is an attenuating, antiseptic, subastringent, and diuretic vulnerary; called cephalic, and alexipharmic: and is recommended internally for wounds, bruises, ulcers, hysteric fits, melancholy, madness, hæmoptoes, mictus cruentus,

tus, dysentery, the gravel, agues, worms, &c. and outwardly as anodyne, discutient, and detergent.

“ Calfacit et siccatur, est partium tenuium, diureticum et vulnerarium. *Ufus*
 “ *Præcip.* in vulneribus mundificandis, consolidandis (intus et extus.) in san-
 “ guine coagulato resolvendo, in calculo renum atterendo, in lumbricis su-
 “ gandis (*scil.* si tempore exaltationis collecta fuerit, alias hac facultate destitui-
 “ tur.) Extrinsecus in contusionibus præcipue nervorum; in tremore, in par-
 “ tu allevando (sit suffitus.) *N. B.* Paracelsus refert inter herbas veneficia
 “ ac spectra arcentes . . . *Præpar.* 1. Aqua stillat. ex foliis ac floribus. 2. O-
 “ leum, ex infusione florum in oleo communi. 3. Sal, ex planta integra in-
 “ cinerata. 4. Tinctura. Dosis gr. vi. ad ʒß.” *Schrod.* 604. Acidum aulterum,
 et aperiens deterisivum ad ulcus pulmonum est in *Boerb. de M. M.*

1. It is of a bitterish resinous taste, and astringent; and of a pretty strong
 smell: the seeds and seed-vessels are more resinous than the leaves; but all the
 plant abounds with a balsamic sulphur. “ Folia . . . Sapore sicco et adstringente,
 “ cum aliquo amarore: semen sapore resinoso, *Lobelio* amaro et ingrato.” *J. B.*
 “ flores, quam capitula, semine gravida, sanguineum succum reddunt.” *J. B.*
 “ The leaves are styptic, and a little saltish: they contain a salt somewhat
 “ like sal. ammoniac, but united to much earth, and dissolved in a liquor re-
 “ sembling the spirit of turpentine: for the transparent points in the leaves,
 “ which look like holes; the black points on the margins of the flowers; and
 “ the tubercles on the fruit are so many vesicles (*bcuteilles*) full of this li-
 “ quor.” *T. Hist.* p. 101. *Geoff.* iii. 607. which being extracted with oils or
 spirits is highly valued as a vulnerary, both inwardly taken, and outwardly ap-
 plied.—2. It is also commended for the jaundice, gout, rheumatism, apoplexy,
 epilepsy, &c. “ Est præstantissimum ad lumbricos pellendos, si flores in sp. vi-
 “ ni infusi exhibeantur.” (*Ex Bartholino.*) *R. H.* “ Si herbam inspergas ca-
 “ seo, omnes vermes exiliunt.” *Hoffm. Cynos.* p. 430.

“ Analyti chymica, ex totius plantæ floridæ lbv. demptis radicibus, prodi-
 “ erunt humoris lbij. ʒxii. ʒiiijß. olei ʒiv. ʒi. gr. l. carbonis ʒxiß. unde cinerum
 “ ʒi. gr. lx. ac inde salis fixi parum alcali ʒij. gr. li. (ergo terræ ʒvi. gr. ix.)
 “ et jactura fuit ʒiiij. ʒvi. gr. lviii.” *Secundum Geoff.* iii. 607. who gives
 it a sal essentialis vitriolico-ammoniacalis.

S E C T. III.

It may be given in substance to ʒi. and more; to ʒß. in infusion, or decoction.
 The oleum hyperici is by infusion and decoction summitatum in oleo oli-
 varum. The leaves are in the theriaca; and seed in the mithridatium.

In the *New London Dispensatory* the mithridatium has hypericum in it; but
 it is not specified whether leaves or flowers are to be taken: and the seeds are
 not in the *M. M.* “ Summitates floridæ ut plurimum in aqua vel vino de-
 “ coctæ vel infusæ ad m. i. usurpantur: folia nonnunquam et semina ad ʒi.
 “ præscribuntur.” *Geoff.* iii. 608. “ R. Sem. hyperici ʒi. conservæ florum
 “ nymph. ʒß. (ʒij. in *Cynos.*) F. Bolus contra maniam et noctambulationem,
 “ (& deliria, *Cynos.*) R sem. hyperici ʒi, summ. hyperici, m. i. anagallid. m. ij.
 “ F.”

“ F. ex aqua decoctum contra maniam et delirium.” *Herman*. MSS. These and such like ought to be tried. “ It is observable, that the flowery tops tinge “ expressed oils of a red colour (which very few vegetable substances will do) “ and communicate a blood-red to rectified spirit. The oil tinged by them is “ kept in the shops.” *New Dispensatory* p. 140. But ol. hyperici *Pharm. Lond.* is made with the flowers only.

H Y S S O P U S.

S E C T. I.

Hyssopus. Offic. *Hyssopus officinarum*, cærulea, sive spicata. *B. P.* 217. *T.* 200. *Hyssopus vulgaris.* *Dod.* 287. *Clus. H.* 356. *Park. i. H. Ox.* iii. 361. *Hyssopus Arabum, Mesuæ et officinarum.* *Lob.* 237. *Adv.* 184. *H. Arabum. Ger.* 579. *Hyssopus spicis secundis. H. Cliff.* 304. Common hyssop, or garden-hyssop. *Hyssopus, vulgaris, spicatus, angustifoliis, flore cæruleo. J. B.* iii. 274. *R. H.* 516.

Where it grows naturally I cannot find. *Lobel* says he found it in some places in Italy. “ Felicior sane nobis fuit *Lobelius*, cum enim eadem loca “ peragraremus, hyssopus nullibi in conspectum se dedit. Hæc planta mul- “ tipliciter variat, foliis, odore, floribus.” *R. H.* In gardens it flowers in July. The herb in flower, or the flowering shoots of that season are used, or the spikes in flower and leaves. For it is a shrubby perennial plant. “ *Officin. nat. folia cum floribus collecta Augusto.*” *Schrod.* 605. “ *Usu: her- “ ba,*” *Dale; Phar. Edin. &c.* “ The whole plant is used.” *Miller.* “ *Her- “ ba integra florida usitata est.*” *Geoff.* So that *Schroder* is the most accurate.” “ *Folia.*” *Lond. M. M.*

Whether the name hyssopus be originally Greek or Hebrew, there is reason to think this plant is neither the *Esof* of the *Hebrews*, nor ὕσσωπος of the *Greeks*; though perhaps these did not differ. Vide *Le Clerc's Hist.* p. 626. I shall only take notice, that καλαμος in *St. Matthew's Gospel*, ch. 27. v. 48. is ὕσσωπος in *St. John's*, c. 19. v. 29. Probably it is the (*zuse* or *cuse*, i. e.) hyssop of the *Arabians*. “ Sed quid est hyssopus noster usualis? *Arabum.*” *Hoffm.* 263. Vide *Mesue Simpl.* l. 2. c. 18. fol. 42. with whom it is purgative; as also with *Dioscorides* l. 3. c. 30. p. 185.

S E C T. II.

It is an attenuating diaphoretic, and diuretic, or a stimulating aromatic; called pectoral, stomachic and carminative; and is commended internally for coughs, hoarseness, asthma, &c. and externally for contusions, blood-shot eyes, and foul mouths.

“ Calfacit et siccat 3. partium tenuium est, attenuat, aperit, abstergit. “ *Usus præcip.* in affectibus pulmonum tartareis, tussi, asthmate. Extrinsecus “ adhibetur crebro ad sugillationes oculorum, ad uterum mundificandum, auriumque tinnitus tollendos (per tritorium suffitus susceptus) ad oris abster- “ sionem

"sionem (in gargarismis.) *N. B.* Sunt qui absinthio in corroboratione ventriculi præferunt. *Præp.* 1. Aqua stillat. ex herba et floribus. 2. Oleum stillat. 3. Conserva, ex floribus. 4. Species diaphysopu, *Nic.* 5. Syrupus simplex, ex succo. And, 6. Syr. compositus." *Schrod.* 605. Acre aromaticum est, et aperiens deterisivum ad ulcus pulmonum, in *Bærb. M. M.*

1. It is of a warm, bitterish, but not disagreeable taste, and fragrant aromatic smell. "Folia sapore acriusculo, odore non ingrato." *J. B.* "Odoris est valde aromatici, saporis acris et calidi, præcipue dum floret." *Nucl. Belg.* 146. "Hyssopus sapore acri, et odore gravi aromatico donatur." *Geoff.* iii. 612. "Hyssopus *Arabum* odorem habet acrem et aromaticum, qui nares et cerebrum ingrata quadam jucunditate ferit, sed et saporem fervidum, suæque acrimonia palatum totum pervadentem, quin præterea amarum." *Hæffm.* p. 264.—2. Summitatum thea is of a saffron tincture, and agreeable warm aromatic taste. Solutio vitrioli turned it brown, precipitating plentifully a dark grey sediment. Ol. tartari p. d. made little change on it; but aqua calcis turned it yellow and a little muddy. With sp. aceti it was diluted only.—3. "Analysi chymica, ex hyssopi floridi lbv. prodierunt humoris lbiv. 3i. 5vi. salis vol. urinosi 3ß. olei 3ij. 3vij. carbonis 3vii. 3i. gr. xxiv. unde cinerum 3ij. 3vi gr. xxiv. ac inde salis fixi alcali 3vii. (ergo terræ 3i. 3vii. gr. xxiv.) et jactura fuit 3iv. 3i gr. xii." Secundum *Geoff.* iii. 612. who adds, salem essentialem obtinet ammoniacalem.—4. It is commended also for dropsies, epilepsy, ecchymoses. "A frightful black contusion of a leg, was cured, in a few hours, by applying the chopt leaves, mixed with fresh butter in the form of a pultis." Vide *Boyle's Works* iv. p. 209. It is by no means so acrid as some make it; neither has it any specific pectoral virtue, more than many such aromatics. We use it almost only in the distilled water. It may be given in substance, infusion, and decoction in large quantities. I never knew the oleum hyssopi essentialè used.

"Hyssopus cum carnibus bubulis decocta, cum aliis oleribus minutim confectis, non insuaviter ex jure editur, ori ac ventriculo grata. Quantopere hyssopus fugillationi oculorum confert testis sit *Riolanus senior*, &c." Vide *R. H.* 516. or *Geoff.* iii. 614. for this quotation; as also for a passage from *Mr. Boyle*, being an observation of its effect in a great contusion.

L A C T U C A.

S E C T. I.

Lactuca. Off. *Lactuca sativa. B. P.* 122. *T.* 473. *Dod.* 644. *Ger.* 306. *R. H.* 220. *H. Ox.* iii. 57. *Park.* 811. *H. Cliff.* 384. *Lactuca. Park.* par. 498. *L. sativa, vulgaris, capitata & non capitata. J. B.* ii. 997. *L. sativa, folio scariolæ. Lcb.* 121. *Adv.* 89. Garden-lettuce.

Great variety of lettuces are cultivated in the gardens. *B. J.* (p. 81, 2, 3.) mentions about 50 of them. But where any of them grow wild I know not. "Crescendi locum addam & differentiam, cum quis dixerit a qua sylvestri planta hæc originem duxerit. An a lactuca, caule & foliis aculeatis?" *H. Cliff.* 384. that is, *Lactuca sylvestris* odore viroso. *B. P.* 123. *T.* 473. The

greater strong-scented wild lettuce. The leaves, tho' remarkably medicinal, are more used at the table than in the shops. "*Officin. nat. Folia & semen.*" *Schrod.* 611. "Herba, semen." *Pb. Edin.* from the *old London-Dispensatory*, more improperly; the caulis &c. being parts of the herb, which are not used. The seed, one of the lesser cold-seeds, is small, long, flat, and light. Some white, others dark brown, without any remarkable taste or smell.

It is a lactescent plant; hence lactuca is its name. "*Lactuca quod copia lactis exuperet, & lac augeat, θηδασξ, Dioscoridi l. 2. c. 165. Theophr. hist. 1. 7. c. 3.*" *B. P. l. c.* Dioscorides does not describe it, (v. p. 145.) as commonly known: but we have so much of it in Theophrastus, and Pliny (l. 19. c. 8. p. 502. and elsewhere) as, with its constant and universal use, leave no room to doubt of our lettuce being the θηδασξ and lactuca of the ancients; which its virtues also confirm.

S E C T. II.

It is diluent, resolvent, soporiferous, anodyne, hepatic and nourishing; called antaphrodisiac; and is commended in all inflammatory, bilious, and putrid diseases, in heat of urine, nephritic pains, want of sleep, vapours, scurvy, &c.

"Refrigerat ad gradum usque 3. siccatur mitius, conciliat somnum, bilis fervescentiam ac æstum compescit, lac auget, alvum leniter movet, ventriculo convenit, multi ac laudabilis nutrimenti est; unde & in acetariis usurpari crebrius solet. Extrinsecus sedat dolorem capitis, medetur ambustis, somnum conciliat (in lotionibus pedum.) Semen valet ad gonorrhœam virulentam, ad urinæ ardorem, ut & ad reliqua quibus folia convenire diximus. *Præpar. 1. Aqua, ex foliis. 2. Succus inspissatus. 3. Caules conditi.*" *Schrod.* 611. Oulus mollissimum, amarum lactescens frigidum, aperiens deterisivum ad ulcus pulmonum, nephriticum, antiscorbuticum frigidiusculum, & in calculo proprium est, in *Boerb. lib. de M. M.*

1. It is of an agreeable, sweetish, cooling, taste, sometimes a little bitterish; and soporiferous, or poppy smell. "Est lactuca folio lacte prægnante, per primam adolescentiam grato, tandem amaro & cibis abdicato, quod fit ubi caulescit planta". *J. B. R. H.* "Lactucæ omnes abundant succo lacteo, dulci & grato, præcipue juniores, in aliis magis est amaricans." *Nucl. Belg.* 156. The common pellucid juice is sweet, and contains probably a saccharine salt; the proper milky juice is bitter and smells like opium, indeed is a kind of it; and according as the plant contains more or less of this, it is more or less bitter: some of the varieties have commonly more, others less of it proportionally; and in dry soils and seasons, and when caulescent, it most abounds, especially the stalks. On this depends the somniferous; on the juice the diluent; and on the more solid parts the nourishing qualities of this famous tho' common plant. Hence says Dioscorides "decocta magis alit." — 2. Cows, rabbits, and other animals eat it and are nourished by it. "Lactucæ moderato esu hominem nutriunt. At si quispiam expressum earum succum largiter hauserit, non secus profecto morietur, quam qui aut cicutam aut papaver sumperit." *Galen. simpl. l. 3. c. 18. fol. 22. A.* "Galenus succum refert e lactucis expressum, & ad cochlearium iv. seu 3ij. quantitatem intus sumptum, non secus ac cicuta & papaver hominem interficere; quamvis folia

“folia majori copia, quam pro succo coch. iv. exprimendo opus est comesta, damnum nullum inferant.” *Geoff.* iii. 652. But where Galen says so I cannot find.—3. The hypnotic quality of lettuce, was known to all the ancients. “Sominno vero aptum est papaver, lactuca, maximeque æstiva, cujus cauliculus jam lacte repletus est, morum, porrum.” *Celsus*, l. 2. c. 32. “Lactuca sativa stomachonitis modice refrigeratoria, somnum concilians (ύπνωτική) alvum emolliens, & lac evocans. Verum decocta magis alat. . . . Cæterum cum in caulem exierunt, vim quandam adipiscuntur succo lactique sylvestris lactucæ similem.” That is like poppies hypnotic and anodyne. Vide *Dioscor.* l. 2. c. 165, 166. “Multi medici, quemadmodum fructibus autumnalibus ficus, ita hoc olus aliis omnibus anteposuerunt: succi enim est quam alia omnia laudabilioris: Plerique autem, priusquam in caulem assurgat, ipsa utuntur, aqua incoquentes: quod ego nunc, ex quodentes mihi male habent, cæpi facere. . . . Etenim in juventute, quoniam os ventriculi (ή άνωγαστήρ) bile effervescebat, æstus moderandi gratia, lactuca utebar. Cum autem ad proVectam ætatem pervenissem, olus hoc, contra quam in juventute, somnum jam omni studio & industria accersenti, auxilio fuit. Quippe qui etiamnum juvenis lucubrandi gratia, vigiliis dedita opera, me assuefacere; declinante jam ætate, ipsa ex se insomni, gravique hoc incommodo afficiebar. Adversus quod unicum mihi præsentissimum remedium lactuca vespere commanducata fuit.” *Galen.* de alim. fac. l. 2. c. 40. Vid. *J. B.* Hence he used the decoction, as well as the decocted herb; for otherwise it would have had little effect, more than other olera mollia, in want of sleep, tho’ more laxative. “Hanc lactucarum vim anodynâ quotidie experimur, quæ quidem non a quodam narcotico et noxio principio dependet, ut nonnulli opinati sunt: sed ab aquoso suo succo nitroso, quo humorum effervescentiam temperare valent, ventriculi, hepatis, renum, cæterorumque viscerum ardorem et æstum mitigare, eorum fibras nimis crispatas et vividius oscillantes laxare, sicque functiones omnes, ac proinde somnum in integrum restituere.” *Geoff.* iii. 650. “Lactucæ capitata exsiccata, dum igne aperto comburuntur fulgurationes identidem emittent, non secus ac nitrum in carbones projectum producere solet.” *Geoff.* iii. 646. *Does it so?*—But whether or not is the Bardana &c. whose leaves (as he says) flash somewhat like nitre, or even any succus nitrosus, anodyne and somniferous by themselves like the lactucæ? Besides if the anodyne and hypnotic virtue of opium depends on a principium narcoticum et noxium; so does that of lettuce: its milky juice inspissated tastes and smells like opium, and has the same effects, tho’ no nitre can be got from it, at least not so much as can have any effect. Altho’ the essential salt of lettuce were pure nitre, which I believe he will not assert, though he makes it only (and it is but a conjecture, it appearing to be more saccharine than nitrous, from the taste of the plant) a “sal nitroso-ammoniacalis, qualis exurgit ex mixtura spiritus nitri et salis volatilis urinosi.” *Ibid.* which can be proved only by thus compounding a salt of the same nature with the sal essentialis lactucæ: But I say supposing it were pure nitre, it must bear so small a proportion to the other principles of this inspissated juice, as to have no claim to any of its virtues. What effect can a grain, yea perhaps not the hundred part of a grain of nitre, have in procuring sleep? Few plants have been so much celebrated and used in all ages

as lettuce has been. Vide *Bod.* in *Theoph.* p. 778.—781. *J. B.* ii. 995.—1001. It is certainly of great use in all diseases, ubi fibræ nimis rigidæ ac elasticæ sunt, and where muriatic, alkaline, or purulent acrimony offend. It is commended in the soda, five ardor ventriculi, gonorrhæa, melancholia, hypochondriaca, &c. “Lactucis . . . est quidem natura omnibus refrigeratrix, et ideo æstate gratæ stomacho, fastidium auferunt, cibique appetentiam faciunt. Divus certe Augustus lactuca conservatus in ægritudine fertur, prudentia *Musæ* medici. . . . Sanguinem quoque augere creduntur.” *Plin.* l. 19. c. 8. p. 502. Galen recommends it for food in tertians, but *Mr. Vaillant* found it a remedy. “*Sebastianus Vaillant* Sexennis . . . neque diu postea febre laboravit intermittente, quæ eludens læta remedia, atque exquisitam diæam, a medico præscripta, ultra quatuor mensium spatia, languidum trahebat. Ille, instinctu felici impulsus suas per herbas pulchram sane sibimet medicinam fecit puerulus. Opportunitatem namque nactus, dum omnes ad sacra colenda exiverant, solus de lecto surgit, herbas petit, legit in horto lactucas, hasque solo resperfas aceto, avide comedit, palato gratissimas suo, atque corpori salubres: illico quippe incolumis evasit, atque convaluit integre.” *Botan. Paris.* præf.

“Epotum vero ipsius semen, venerem assidue somniantibus opitulatur, et concubitus arcet. At ipsæ in cibo frequentiores claritati oculorum officiunt.” *Dioscor.* l. c. Lactucam sylvestrem narcoticam esse et soporiferam, adeoque viribus papaveri similem, ut *Dioscorides* et *Plinius* tradunt, opii vehemens et virosus odor abunde convincit. Verum omnia in genere opii irritare potius quam extinguere appetitum ad venerem me jampridem monuit *D. M. Lister*, saltem modice sumpta, non secus ac vinum, ac alii generosi liquores, quibus et viribus quodammodo respondere videntur. De lactuca sativa aliter se res habet. Hæc enim, dum adhuc recens et tenera est, antequam excaulescat, commanducata, certo certius veneri adversatur, et libidinem extinguit.” *R. H.* 221. But, with all deference, I may say on as good ground, certo certius succus lacteus lactucæ sativæ et sylvestris, est plane ejusdem naturæ: and that neither opium, nor wine, even modice sumpta, do always appetitum ad venerem irritare. They may prove incentive at one time, and not at another, on the same person, even in health, according to his present circumstances. Vide *Opium*. Such prejudices against lettuce I place among the vulgar errors. Nor do I see any reason why “asthmaticis interdiciuntur, ac illis quibus visus debilius est.” Vide *Geoff.* iii. 653. while they are found so beneficial malo hypochondriaco laborantibus. Vide *J. B.* p. 651.

Mr. Geoffroy has favoured the public with the analysis, 1. Lactucæ capitatæ. *B. P.* foliorum tenerorum, et nondum in caput conglobatorum. 2. Lactucæ capitatæ capitum, cum radicibus. 3. Foliorum lactucæ capitatæ, tum virentium tum albicantium, demptis caulibus et medulla. 4. Lact. cap. caulium seu medullarum. 5. Lact. cap. radicum. 6. Lact. cap. seminum. 7. Totius lactucæ capitatæ floridæ. 8. Succus ex lact. capitatis expressi. 9. Massæ residuæ foliorum lactucæ capitatæ, ex quibus succus fortiter et accurate expressus fuerat. 10. Decocti lactucarum aqua coctarum transcolati, et ad extracti liquidi, seu syrupi consistentiam in vase aperto redacti. 11. Foliorum lactucæ romanæ (longæ dulcis. *J. B.* ii. 998. *T.* 473.) candidissimorum

rum et tenerorum. & 12. Lactucæ sylvestris (costa spinosa B. P. 123.) semipedem altæ, demptis radicibus. Tho' not all equally circumstantial. I shall transcribe one with a useful observation, or two, he makes on them.

"Analyſi chymica ex lactucæ capitatæ foliorum tenerorum et nondum in caput conglobatorum lbv. predierunt humoris limpidi, odore et ſapore virentem herbam referentis, ſubſali, obſcure alcali urinoſi, abſque ullo acidi indicio 3viiiſ. gr. xxiv. humoris turbidi albicantis, primo leviter fœtentis, ſubſali et urinoſi, deinde magis ac magis empyreumatici, alcali urinoſi manifeſte, ac tandem ſale volatili urinoſo copioſo imprægnati lbiv. 3vijſ. ſalis vol. urinoſi concreti gr. l. olei 3v. carbonis 3iiſ. gr. xlvij. qui rite calcinatus reliquit cinerum 3iſ. ex quibus ſalis fixi mere alcali 3iv. gr. xlv. lixivio ſunt extracta. Partium jactura in diſtillatione fuit 3ij. 3i. gr. lvij." (tom. iii. 644.) Erat terræ 3vij. gr. xxvi. *N.B.* From the capitum cum radicibus, lbv. compared with the former, were got humoris $\frac{9}{10}$ or about $\frac{1}{10}$ leſs; Salis vol. quadruple, or $\frac{4}{5}$. olei $\frac{5}{8}$. cinerum $\frac{3}{4}$. ſalis fixi $\frac{1}{10}$. terræ $\frac{1}{2}$. nearly. But the jactura was little more than $\frac{1}{3}$. Hence they do not appear to be both accurate; and if the ſum of all the principles with the jactura be caſt up, it comes to lbiv. 3vi. only. So 3x. are wanting.—What follows is of more conſequence, and of more general uſe.

"Decoſtum lactucarum aquâ coſtarum tranſcolatum, et ad extracti liquidi, ſeu ſyrupi conſiſtentiam, in vaſe aperto igne, reductum, in diſtillatione liquorem primo acidum auſterum, deinde empyreumaticum, urinoſum et ſale alcali urinoſo copioſo imprægnatum præbuit. Unde concludere licet ſales volatiles urinoſos plantarum, cæteris principiis involutos, neque diuturna coſtione, neque lenta humoris evaporatione in vaſe aperto exhalari; imo fortiori igne indigere ut evolantur, aut potius fortaffe ut producantur." (tom. iii. 646.) See a like obſervation by him on the analyſis of tartar. M. M. ii. p. 760. Had he known, or conſidered this from the beginning, he would not have attributed the virtues of a great number of ſimples to, or explained them by, the volatile ſalt, which can be by fire obtained from them. Nevertheless his conſclusion is too general, and does not hold in all, particularly in the acria volatilia, from which volatile ſalt can be got more eaſily; and diſcovers, and acts as in ſuch a manner, even while cæteris principiis eſt involutus. Can any volatile ſalt be obtained from the extractum cochleariæ, raphani ruſtici, ſinapi, allii, ari, &c.

"Mirum ſane eſt hanc plantam aquoſam, et fere inſipidam, tantam ſalis volatilis urinoſi copiam, in analyſi præbere, ut plurimas longe ſapidioreſ, hujus ſalis copiâ ſuperet. In ea ſal acidus alcali urinoſo ita obruitur, ut in nonnullis analyſibus vix detegi poſſit, et ſuccus lactucæ chartæ cæruleæ colorem non mutat. Vel potius ſal eſſentialis nitroſus hujus plantæ, ſalipetræ prorfus ſimilis, vel ſaluſ eſt, qui nullam acidi aut alcali indicium præbet; at diſtillationibus per ignem, in alcalinum ſalem, tum fixum tum volatilem, fere totus convertitur." *Geoff.* Ib. So that he ſeems to think there muſt be an acid in every plant, whether diſcoverable or not.

"His lactucæ analyſibus academici Pariſienſes primario deprehenderunt quosdam liquores ex plantis diſtillatos, acidi et alcali ſalis notas indiſcriminatim præbere; nempe cum aliis liquoribus, acidis aut alcalinis, permiſtos, pariter ebullire, cyaneam Heliotropii tincturam rubram efficere, et
"limpidam.

“limpidam mercurii subl. cor. solutionem turbidam, lacteam, vel etiam spissam et grumescentem reddere, ac ut aiunt præcipitare. Quibus experimentis acida et alcalia in ejusdem liquoris sinu, pacifice, et sine ulla effervescencia, aut mutua lucta sæpius recondi.” *Geoff.* iii. 647. Here he seems to own that he owes the analyses to the academy. Whether the errors are owing to the correctors, I know not; but in the analyses lactucæ romanæ, the sum total is neat 3xiij. less than the quantity analysed.

The dose need not be determined. We keep no preparation of it. The aqua stillatitia, is but good water. The extract might be useful. The seeds may be made into an emulsion like poppy-seeds; but they are never used here. “Aqua lactucæ distillata servatur in officinis, quæ utilis est ubi refrigeratione et humectatione opus est, et in julapiis et potionibus refrigerantibus recipitur. Emulsio ex seminibus lactucæ, in ejusdem aqua parata, cum syrupo nenupharis, aut Althææ, urinæ ardorem mitigat, quietem nocturnam accersit, et venerea insomnia pellit.” *Geoff.* (iii. 654.) who employs 15 pages on the lettuces.

L A M I U M.

S E C T. I.

Lamium. Lamium album, urtica mortua. *Off.* Lamium, album, non fæstens, folio oblongo. *B. P.* 231. Lamium album. *Ger.* 702. *R. H.* 559. *Syn.* 240. L. vulgare, album; sive archangelica, flore albo. *Park.* 604. *H. Ox.* iii. 384. *T.* 183. Galeopsis, sive urtica iners, floribus albis. *J. B.* iii. 322. Urtica iners, sive lamium primum. *Dod.* 153. Lamium, foliis cordatis, acuminatis, ferratis, petiolatis. *H. Cliff.* 314. White archangel, or Dead nettle.

It grows in plenty by hedges, in thickets, &c. flowering in May. The herb and flower are used. “*Officin.* Herba cum floribus.” *Schrod.* 705. “Herba, flores.” *Pb. Ed.* “Flores.” *Pb. Lond.* “Urtica . . . Quæ innoxia, morfu carens, lamium vocatur.” *Plin.* l. 21. c. 15. p. 554. “Lamium, ex lamio, Ioniæ monte: quod ad lamas nascatur.” *Martin.* (*Dict. Cambr.*) “Lamium dictum nonnullis putatur a florum cucullata effigie, larvatam lamiæ quodammodo repræsentante.” *R. H.* Although this is not the lamium *Plinii* l. 22. c. 14. p. 571. nor galiopsis *Dioscoridis* l. 4. c. 95. p. 280. yet probably it is a species of the same genus, and not much different in qualities. “Galiopsis, quam alii galeobdolon vocant, toto frutice cum caule et foliis urticam refert. At leviora sunt folia, et valde gravem odorem trita reddunt: flores vero tenues sunt, ac purpurascetes. Nascitur circa sepes, semitas, ædificiorumque areas ubique.” *Dioscor.* l. 4. c. 95. p. 281.

“Varia genera urticæ mortuæ passim observantur, colore, odore, figura, et simil. differentia. Datur fœtida et non fœtida; maculata et non maculata; flore purpureo, albo, luteo. Primas autem præ cæteris dant fœtidæ, ac præcipue maculatæ. Huic surrogari tamen non nequit fœtida non maculata.” *Schroder.* 705.

S E C T. II.

It is emollient and resolvent; called vulnerary: and is recommended for wounds, ulcers, obstructions of the viscera, but as a specific for the fluor albus. I never knew it used here.

“*Urtica mortua seu galiopsis calfacit et siccatur. Præcipue commendatur quæ flore purpureo, ad dysenteriam (decoctum propinatum): flores albi ad fluorem album specificè celebrantur. Extrinsecus medetur urtica pano, &c. Præp. conserva ex floribus albis.*” *Schroder. 705.*

1. It is of an herbaceous, sweetish taste, and somewhat fetid. *Summitatum floridarum thea* has the same taste and a greenish smell: it reddens very little a solutio heliotropii: and a solution of vitriol turns it green, but not opaque, neither precipitates any thing after even six hours: after it stood macerating 8 or 10 days it smelled acid. — 2. By the analysis it seems to contain a large quantity of oil and essential salt. “*Analyti chymica ex plantæ floridæ, demptis radicibus, lbv. prodierunt humoris lbiv. 3v. 5i. gr. vi. olei 3ij. 5i. carbonis 3v. 5i. unde cinerum 3iij. gr. xlii. ac inde salis fixi alcali 5ix. gr. xii. (ergo terræ 3xi. gr. xxx.) et jactura fuit 3iij. gr. lxvi.*” *Secundum Geoff. iii. 658.* who adds, “*lamii succus chartam cæruleam vix mutat. Salem essent. tartareum continere videtur, multo sulphure bituminofo implicitum. Ab hoc sulphure potissimum ejus vis balsamica dependet Quotidiana experientia in fluore albo et hæmorrhagiis uterinis, ejus flores et folia utilia apud nos deprehenduntur. Summitates floridæ in aqua fervida macerantur, et unus aut alter cyathus bis terve in die hauritur. Vel ex iisdem juscula cum portulacæ foliis parantur. Aut ex floribus cum saccharo conditum, seu ut aiunt conserva coquitur, singulis diebus ad 3i. sumenda.*” This conserve, tho’ every where commended, has not yet been admitted into the British Dispensatories. — 3. It is also commended as a discutient of hard tumors, tho’ scrophulous. “*Herba, tusa et imposita, valere creditur ad tumores quoscunque discutiendos, necnon ad inflammationes, plagas, ulcera putrida et vulnera; ad scrophulas aperiendas, &c.*” *R. H. 559.*

L A V A N D U L A.

S E C T. I.

1. *Lavendula, lavendula latifolia. Off. Lavandula latifolia. B. P. 216. T. 198. Lavandula, Dod. 273. L. flore cæruleo. Ger. 583. Lavendula major, sive vulgaris. Park. 72. R. H. 512. H. Ox. iii. 352. Pseudo-nardus, quæ vulgo spica. J. B. iii. 281. Lavendula Offic. . . . Spica officinarum Germaniæ. Dale 141. Lavendula, foliis lanceolatis integris, spicis nudis. H. Cliff. 303. The most common or broad-leaved lavender. R. H.*

It grows freely in Languedoc, Spain, and Italy. “It is planted in gardens; but is seldom met with in England; and never prescribed in the

“shops.” *Miller Bot.* 422. Here (in Scotland) it is as common as the following, or other lavender. “The broad-leaved lavender, tho’ very common in most parts of Europe, yet in England is rarely to be found, notwithstanding it is as easily propagated as any of the other sorts.” *Miller’s Diet.*

2. *Lavendula angustifolia*: *spica vulgaris*. *Off.* *Lavandula angustifolia*. *B. P.* 216. *T.* 198. *Lavandula altera*. *Dod.* 273. *L. minor*, five *spica*. *Ger.* 584. *Lavandula minor*, five *spica*. *Park.* 73. *R. H.* 512. *H. Ox.* iii. 352. *Pseudo-nardus*, quæ *lavendula vulgo*. *J. B.* iii. 281. *Spica*, seu *lavendula vulgaris*. *Offic.* Common lavender, or spike. *Dale.* 141. *Varietas prioris est* *Lin. H. Cliff.* 303. Narrow-leaved or small lavender; by some Lavender-spike. *R. H.*

“This is the lavender which grows every where in our gardens, and is commonly used; the broad-leaved being rarely to be met with, and that only in some gardens of the curious; though Gerard, Parkinson, and even Mr. Ray, took the broad-leaved to be our common lavender.” *Miller Bot.* 259. “*Spica mas*, insigniter *lavandula latifolia*. *C. B.* 1. *Spica fœmina*, *lavandula*, dicitur *lavandula angustifolia*. *C. B.* 2. Non discrepant nisi magnitudine, quæ tam florum, quam foliorum, in *spica* major est, in *lavandula* minor. Odor itidem *spicæ* gravior est, *lavendulæ* gravior, ideoque promiscue usurpari possunt. Nobis vulgatiore est *spica fœmina*.” *Schrod.* 685. “*Lavandula duplex* est, altera folio angusto, quæ Italica dicitur, *spica*, vel *spica nardi officinarum*; alia lato, quæ Germanica, quæque generis nomen retinet, ab usu in balneis.” *Hoffman.* p. 373.

It grows with the former. In gardens they flower in July. The herb, or leaves and young shoots, and flowers, of either indifferently, are used. “*Stæchas Arabica* Mesuæo dicitur. *Pseudo-nardus Plinii* l. &c. 12. censetur. Alii *stæchadi veterum cognatum faciunt*: alii *cneorum*, five *casiam albam Theophrasti* volunt: quidam *Iphium Plinii* suspicantur.” *B. P.* The *New Lond. M. M.* retains only the *lavendulæ angustifoliæ B. P.* flores.

S E C T. II.

They are stimulating attenuants, diaphoretic, and carminative, or acrid aromatics; called cephalic, nervine and uterine; and commended in vertigoes, lethargies, palsies, spasms, convulsions, colics, female obstructions, hard labour, vapours, &c.

“*Calfacit et siccatur* 3. (*prævalet tamen spica*) *saporis subacris ac subamari, partium tenuium, cephalica est, ac nervina. Usus præcip.* in catarrhis, paralyfi, spasmo, vertigine, lethargo, tremore artuum. In urina, mensibus, ac foetu pellendo (unde et parturientibus exhiberi solet), in torminibus ventris flatulentis. Extrinsecus in lixiviiis, pro capitis & artuum affectibus, in masticatoriis, pro catarrho exsiccando, et revellendo ad palatum, ne ad pulmones defluat. *N. B.* Odore suo fugat pediculos. *Præpar.* 1. *Conserva florum.* 2. *Confecti flores.* 3. *Aqua stillat. ex floribus.* 4. *Oleum spicæ, cum aqua ascendens. Uteri motus ac dolores compefcit, umbilico illitum.*” *Schrod.* 686. *Stimulans aromaticum est. Boerb. Lib. de M. M.*

1. They are of a warm bitterish aromatic taste, and fragrant smell. “*Folia spicæ*

“ spicæ, odoris vehementis, grati, saporis amaricantis. *Lavendulæ folia* odor re adeo vehementi prædita non sunt.” *J. B.* “ *Lavendula . . . odoris fortis et grati: saporis amari, calidi et acris.*” *Nucl. Belg.* 168. Summitatum thea is somewhat aromatic, tho’ to me not very agreeable, and bitterish, leaving behind it a flavour like that of bitter almonds: it only dilutes syr. violarum; makes little change on the solutio heliotropii; and a solutio vitrioli turns it to a dark brown; and soon precipitates a dark grayish sediment. An itaque tam salutaris? — 2. They yield a singular kind of essential aromatic oil, called oleum spicæ; which (according to *Mem. Acad.* 1715.) abounds most in the flower-cups. — 3. *Analyti chymica ex spicarum floridarum lavendulæ (angustifoliæ) libv. prodierunt humoris (primo subacidi, dein magis ac magis acidi) libij. 3xiv. 5vii. gr. liv.* (of which the last 3ij. 5ij. were sale vol. urin. copioso imprægnatæ, nec non acidæ). *Olei 3ijß. 3i. carbonis 3vii. 5vii. 3i. unde cinerum 3ij. 3v. ac inde salis fixi alcali 5vii. gr. xlvi. (ergo terræ 3i. 3v. gr. xxvi.) et jactura fuit 3vß. gr. xviii. secundum Geoff. iii. 685.* who adds, “ *Lavendula sale obtinere videtur essentialem ammoniacalem, similem ammoniacali composito ex sale vol. urinoso, aceti acido plus quam saturato, cum oleo copioso, tum essentiali tum crasso, accurate permisto. Idem dicendum de spica (that is lav. latifolia with him) quæ iisdem gaudet principiis, imò copiosioribus et penetrantioribus, ut ejus odor testatur, et similibus virtutibus donatur. Quapropter indiscriminatim ad usum medicum usurpatur. Hic vero lavendula, utpote magis familiaris, frequentius in usum venit. Oleum essentielle spicæ et lavandulæ heliotropii tincturam rubore inficit, ratione salis acidi contenti.*” *An recte?* — 4. It is much commended, and perhaps more than it ought used; not only as an acrid aromatic, and so hurtful in hot and inflammatory diseases of the head, as well as of other parts; but as containing a spirit, somewhat of the nature of that in the laurel, or bitter almonds; and, like the aqua cerasorum nigrorum, noxious in these diseases, wherein it is most commonly prescribed. What *Hoffman* says of the lillium convallium is more applicable to this plant. “ *Aqua distillata florum discutit, aperit, attenuat, insigniter. . . . Non mirum igitur si aqua, præcipue illa quæ cum vino paratur, valde laudatur in syncope, omnique partium principum corroboracione. Verum enimvero scire oportet, nisi debilitas sit ab intemperie frigida, sive nuda, sive cum frigidis humoribus vias obsidentibus, nihil fieri. Ubi enim a caliditate tale quid est, insignem contra oportet expectare læsionem.*” *Hoffman.* p. 315. Vide *Dod.* p. 274. or *Geoff.* iii. 687. where he is quoted at large; as is also an instance of an apoplexy brought on, as was supposed, by a strongly aromatic cucupha, which required 6 or 7 V. S. to cure it, from *Sim. Paulli.* “ *In balbutie, et linguæ paralyti spiritu vini lavendulato os sæpius abluitur. Rulandus in curationibus empiricis, teste Etmullero, beneficio hujusce spiritus virum 70 annorum, aphoniâ laborantem curavit, cochlear unum pro dosi propinando.*” *Geoff.* iii. 688. “ *Quædam annorum 68 linguæ paralyti laborans, infundebat per noctem flores lavendulæ, in vino adusto, vel sublimato (that is in brandy): cujus infusi 3i. mane et ante introitum lecti, assumebat per aliquot dies, ac statim recte loqui indies cœpit.*” *Mart. Ruland.* cur. empir. (*Budissæ* 1680. in 8vo.) p. 85. and this is the only cure our authors can refer to. How accurately quoted is evident! “ *In difficili partu semen lavandulæ est oppido conducibile . . .*

“ Obiter tamen hic notandum est, calida hæc acria et vehementiora medica-
 “ menta ad partum juvandum non proficere, nisi in debilitate virium et parti-
 “ um atonia, quæ quidem minus frequenter occurrit, quam summa partium
 “ rigiditas, intumescencia et ardor &c.” *Geoff.* iii. 688. The two compound
 powders he gives you have in *R. H.*

S E C T. III.

They may be given in substance to $\mathfrak{z}\mathfrak{i}$; in infusion to $\mathfrak{z}\mathfrak{i}\mathfrak{j}$; the conserva-
 florum to $\mathfrak{z}\mathfrak{i}\mathfrak{ss}$; spiritus compositus to $\mathfrak{z}\mathfrak{i}\mathfrak{i}$. (which contains more than gr. v. oleo-
 rum essentialium) tho' $\mathfrak{z}\mathfrak{i}$. is enough at a time; and it is ordered by drops, com-
 monly xl. l. lx. The flowers are in the aqua pæoniæ composita; and the es-
 sential oil in the spiritus lavendulæ compositus, spiritus salinus aromaticus, et
 emplastrum cephalicum.

“ Pulvis florum, vel semina contusa a $\mathfrak{z}\mathfrak{i}$. ad $\mathfrak{z}\mathfrak{i}$. præscribuntur. Infusum
 “ florum theæ adinstar præparatur. Aqua distillata simplex vel spirituosæ,
 “ tinctura florum cum spiritu vini parata ad $\mathfrak{z}\mathfrak{i}\mathfrak{j}$. tresve, (a large dose indeed!)
 “ conserva ex floribus ad $\mathfrak{z}\mathfrak{i}\mathfrak{ss}$. et oleum essentialiale ad guttas ij. iij. vel vi. intus
 “ sumitur.” *Geoff.* iii. 686.

The spiritus lavendulæ compositus has long been a famous medicine in
 England, and undergone many alterations. The oldest receipt I have of it is
 that in *Culpeper's Dispensatory* (edit. 1653.) p. 63. in which are 30 ingredients;
 which are merrily enough, as well as satyrically animadverted-on, by that au-
 thor: who after several queries says, “ *To make it is a task almost, if not alto-*
 “ *gether, as hard as to piss down Paul's.*” However, this receipt kept its place,
 with the loss only of two of its simples, viz. jujubs and emeralds, until the edi-
 tion 1721. when other two of the ingredients only were lopt off, viz. peony seeds
 and pearls. But the *Committee* of late went roundly to work; so that now there
 are in *Pharm. Lond.* a spiritus lavendulæ simplex, of which, with sp. rosmari-
 ni, cinnamon, nutmeg and red saunders, the compound spirit is prepared.
 The *Edinb. Dispensatory* also shew our College is not too old to learn.
Compare Edit. 1722. 35. and 44.

The oleum spicæ in Provence is distilled from the flowers of the lavendu-
 la latifoila. *B. P.* “ The best oil d'aspic brought from Provence, contains
 “ $\frac{3}{4}$. either of spirit of wine, or oil of turpentine. By burning a little of
 “ the mixture, on a bit of paper, or in a spoon, the oil of turpentine, if in it,
 “ may be discovered, because it smokes more, and varnishes the spoon more,
 “ than the genuine oil: and if mixed with spirit of wine, by pouring it into
 “ water, for thus the oil separates from the spirit, and swims above. The
 “ common oleum spicæ of the shops, is only the oil of turpentine perfumed
 “ with a small quantity of the true essential oil.” Vide *Observations on the*
oil d'aspic, by Mr. *Geoffroy junior*, *Mem. Acad.* 1715. p. 321, &c. It is used
 in varnishes, enamels, &c. more than in medicine. The Laboratory here pre-
 pares a considerable quantity of it, and sells it genuine and free of all mixture.
 “ Oleum spicæ lavandulæ distillatum, ex Gallo-provincia et Gallia-narbo-
 “ nensi, ubi utraque lavandula uberrime crescit, ad nos affertur, sed sæpius
 “ adulteratum, et cum spiritu vini aut cum oleo terebinthinæ permixtum.

“Mangonium utrumque facile detegitur. . . . Apud varios artifices usitatissimum est, præsertim ad opera varia vernigene illinienda.” *Geoff.* iii. 690. Why does not *D. Petrus Magnol*, in his *Botanicum Monspelienſe* (edit. Monſp. 1686. in 8vo.) mention the *lav. angustifolia*, if it is common there? “*Lavendula latifolia*. *Pin.* Pseudonardus, vulgo spica *Ț. B.* vestiuntur plerique montes in Gallia Narbonensi, et campi deserti *lavendula*, Junio, Julio, ac etiam autumno florente.” *Bot. Monſp.* p. 151. But not a word is said of the *lav. angustifolia*. Is the *latifolia* the *planta naturalis*?

“Hoc oleum in nervorum ac tendinum relaxatione, in paralyticis et rheumaticis affectionibus, plurimum prodest, sive interne gut. ij. iij. vi. vel saccharo affusæ propinentur in vino aut aqua cardiaca aut cephalica quacunque: sive cum spiritu vini, oleis, aut unguentis quibuscunque convenientibus illinatur. . . . Hujus olei odorem fugiunt blattæ, pediculi, et alia insecta. Propterea in his fugandis vel enecandis apprime conducit.” *Geoff.* iii. 689. 690. Where is an instance of the bad effect of a mercurial litus for the pediculi inguinales. “Spicæ autem oleum, tam penetrantis est odoris, ut ego toto corpore abominer. . . . Conserva est insigne capitale, sed ingratum.” *Hoffman.* p. 373. *par.* 17. The conserva florum, formerly in our Pharm. was omitted in the edition 1744: probably it may be reinserted in the next; since retained in the *New London Dispensatory*. But it is not in edit. 1756.

L E U C O I U M.

S E C T. I.

Leucoium. *Leucoium luteum.* *Cheiri. Offic.* *Leucoium luteum*, vulgare. *B. P.* 202. *T.* 221. *H. Ox.* ii. 243. *L. luteum.* *Dod.* 160. *L. luteum* vulgo *cheiri*, flore simplici. *Ț. B.* ii. 872. *R. H.* 782. *Syn.* 291. *L. floribus luteis*, *keiri Arabum.* *Lob.* 179. *Viola lutea.* *Ger.* 456. *Keiri*, sive *leucoium simplex*, vulgare. *Park. par.* 257. *Cheiranthus*, foliis lanceolatis, acutis, glabris. *H. Cliff.* 334. The common wall-flower; vulgo Roman violets.

It grows in great plenty on old walls, buildings, &c. flowering almost all the year round, in one place or other. The flowers only are used. But the seed also, and root, are ordered in *Hippocrates*, as medicinal: flores et semen: *Dioscorid.* flores, semen, frutex, et radix. in *Galen.* “*Officin.* Flores, seu herba cum floribus, et raro semen. Crescit nobis in hortis, raroque sponte provenit.” *Schrod.* 564. *Leucoion* signifies *viola alba*; *Keiri* is *Arabian*. “*Leucoion vulgaris* est notitiæ, sed est in floribus differentia. Namque aut albi, aut lutei, aut cærulei, aut etiam purpurei reperiuntur. Est porro leucoium luteum, inter cætera, præcipui in medicina usus.” *Dioscorid.* l. 3. c. 138. p. 230.

S E C T. II.

They are antacid, acrid, detergent, diuretic and menagogue; called cordial, nervine, and uterine; and commended chiefly in female obstructions,

hard labour, retentis secundinis; also for the palsy, &c. cum alliaria fere convenit planta.

“ Cordiales sunt, calfaciunt et siccant 2. attenuant, discutiunt, partium sunt tenuium, extergunt, nervini sunt, dolores mitigant, menses cient, secundinam proritant. *Præp.* 1. Conserva ex floribus. 2. Aqua, ex floribus vel integra planta. 3. Oleum, ex infusis floribus in oleo veteri.” *Schrod.* 564.

1. The flowers are of a disagreeable bitter taste; and fragrant sweet smell. *Herbæ thea* is a little tinctured, of a nauseous bitter taste, and an unpleasant faint scent: it reddens not syr. violarum, nor solutio heliotropii: ol. tartari turns it greenish, but not fetid; and the solution of vitriol makes it orange-coloured, but not opaque. “ Folia sunt saporis subacris; flores valde odorati, sapore mihi ingrato; semen gustu acri et amaro.” *J. B.* “ This plant is bitter and of an herbaceous saltish taste, it reddens (*assez*) the blue paper. By a chymical analysis, besides several acid liquors, it yields some volatile salt, much oil and earth: so it is full of sal ammoniac, sulphur and terrestrial parts.” *T. Hist.* p. 480. “ Flores potissimum in usum veniunt. Keiri folia saporis sunt amari, herbacei, subsalsi, et eorum succus chartam cæruleam rubro colore tingit. . . . Keiri scatet sale ammoniaco, cum multo sulphure, tum tenui tum crasso conjuncto.” *Geoff.* iii. 640. Thus he copies, but names not *T.* — 2. It comes near to the alliaria and nasturtium aquaticum in character; but differs much from them in smell; on which its cordial virtues are founded. Does the sweet scent continue, or rise in distillation? — 3. This plant, and especially the flowers, have been always much commended in women's diseases; and used both outwardly and inwardly. They are commended also for the green-sickness, jaundice, apoplexy, rheumatism: and why not scurvy also? It is one of the three famous aristolochies in Hippocrates (vid. *Artemisia*), and is often used by him, and the root and seeds as well as flowers. “ Ferunt hoc semen, magna dosi sumptum, non solum foetum vivum pellere; sed vivum enecare, et enecatum ejicere.” *Geoff.* iii. 641. “ Episcopus Tridentinus ad preservationem ab apoplexia et paralyti, feliciter utebatur conserva florum cheiri in aqua sua propria adsumpta. *D. Soame, ex Obs. Reusneri.*” *R. H.* Vide *J. B.* ii. 871.

“ Analyti chymica, ex florum keiri lbv. prodierunt humoris lbiv. 3vij. 3v. gr. xlii. olei 3i. 3vii. gr. xxxvi. salis vol. urinosi 3i. gr. xxx. carbonis 3iv. 3ijß. unde cinerum 3i. 3ijß. et inde salis fixi falsi 3iv. gr. xxiv. (ergo terræ 3vi. gr. xii.) ac jactura fuit 3j. 3vii.” Secundum *Geoff.* iii. 641. The first humoris 3vii. or vi. were fere inodoræ et insipidæ, yet obscure acidæ; and nothing alkaline or urinous appeared till the last two or three ounces: all the rest was more and more acid; yea the very last ounce but one, was humoris manifeste acidi, et nonnihil alcali urinosi: which seem to want confirmation.

S E C T. III.

They may be given in powder to 3i. in infusion to 3ii. in conserve to 3i. We keep no preparation of it. It is too common to be much valued.

“ Folia et flores ad M. 1. macerantur per 24. horas in vini lbj. pro duabus dosibus

“ dosibus mane et sero propinandis: vel in aqua communi decoquuntur ad
 “ viscerum obstructions. Semen ad ʒi. vel ʒij. intus sumitur. Oleum per
 “ infusionem ex floribus potenter resolvit, et rheumaticos dolores sedat. Eo-
 “ dem in Italia ad facilitandum partum regio pubis inungitur.” *Geoff.* iii. 641.

LEVISTICUM. *Vide* Roots.

LILIUM ALBUM. *Vide* Roots.

L I L I U M C O N V A L L I U M.

S E C T. I.

Lilium convallium. *Offic.* Lilium convallium, album, *B. P.* 304. *T.* 77.
 Lilium convallium. *Dod.* 205. *Ger.* 410. *R. H.* 667. *Syn.* 264. L. convallium.
vulgo. *J. B.* iii. 531. *H. Ox.* iii. 539. Lilium convallium, flore albo. *Park.*
par. 349. Liliago. *Bot. Par.* 116. Convallaria, scapo nudo. *Fl. Lap.* 79.
H. Cliff. 124. Convall-lillies, or May lillies; in some places liriconfancie. *Ger.*
 Lilly-convally, or May-lilly. *R. H. vulgo* Lilly of the valley.

It grows in heaths, woods, hilly and shady places, flowering in May. The flowers are used, and also the root. “ *Officin.* Soli flores, raro radix.” *Schrod.* 616.

“ Lilium, quod a loco natali convallium appellatur, a quibusdam lilium
 “ vernum Theophrasti 6. *Hist.* 7. censetur. Alii cœnanthen ejusdem. l. 6. c. 7.
 & Athenæi volunt.” *B. P. Vid. Hoffman.* p. 315.

S E C T. II.

They are attenuant, deobstruent and diuretic, or deterfive and aromatic; called cephalic; and commended in vertigoes, apoplexy, palsy, epilepsy, fainting, &c. and outwardly as errhine and sternutatory. The root and leaves are much of the same nature with the flowers.

“ Calfaciunt & siccant, cephalici sunt. *Ufus præcip.* in morbis capitis frigidis, ut apoplexia, paralyfi, vertigine, epilepsia. Hinc in lipothymia. In-
 “ signe itidem errhinum exhibent pulverisati. *Præpar.* 1. Aqua simplex, ex
 “ floribus. 2. Spiritus vini liliatus, ex floribus cum vino vel malvatico distil-
 “ latis. 3. Spiritus liliorum, ex floribus fermentatis distill. 4. Conserva, ex
 “ floribus. 5. Oleum, ex infusione florum recentium in oleo veteri. 6. Pul-
 “ vis sternutatorius, ex floribus pulverisatis.” *Schrod.* 616. Inter stimulantia
 aromatica est in *Boerb. Lib. de M. M.*

1. These flowers are of a pretty bitter, and somewhat disagreeable taste, and fragrant sweet smell. The roots are sweetish at first, then disagreeably bitter, and smell sweet, but not like the flowers. “ Flores sunt odoris suavissimi, sa-
 “ poris amaricantis: radix dulcis & aromatica est *Camerario.*” Secundum *J. B.*
 “ Odor florum fragrantissimus, & pene indicibilis, & sunt amarissimi. Radix
 “ est odorata & aromatica, sternutamentis appetita, ut *Camerarius* scribit.”
Hoffman. 315. “ The flowers analysed, after a long maceration, give several

“ acid liquors, much volatile salt, and a great deal of oil ; with some earth :
 “ so seem to contain much sal ammoniac. They are aperitive, &c.” *T. Hist.*
p. 485. — 2. The flowers, and root also, make excellent snuff, tickling the
 nose and causing sneezing effectually, without any uneasiness or pain, and which
 ceases at pleasure, by blowing it out. The root was an ingredient in the pul-
 vis cephalicus, and for common use the best of the five ; but was expelled with
 rosemary in 1744. — 3. The flowers in conserva, aqua stillatitia, & spiritus,
 are commended in lowness of spirits, weakness of the vital functions, &c.
 “ Quinimo aquam stillatitiam jamjam animam expirantis ori inferunt, rati ex
 “ ejus assumptione homines morientes in vita retineri posse per plusculum tem-
 “ poris spatium.” *Matthiol.* *p.* 631. *Vide Thea.*

“ Analyfi chymica ex florum recentium lbv. prodierunt humoris lbiv. 3vi.
 “ 3v. falis vol. urinosi 3i. gr. x. olei 3ij. 3iij. gr. iv. carbonis 3ij. 3iij. unde
 “ cinerum 3ix. gr. xvi. ac inde falis fixi alcali, 3v. (ergo terræ 3iv. gr. xvi.)
 “ & jactura fuit 3vi. 3vi.” (rather 3ij. 3iij ; as the whole makes lbv. 3iv. 3iij.)
 “ secundum *Geoff.* iii. 726. “ Etmullerus observat odoras florum particulas
 “ in oleum essentiale nulla arte redigi posse. Observat insuper flores simplici
 “ distillatione, absque prævia fermentatione, phlegma præbere minus odorum,
 “ quam si prius fermentati fuerint. Nam post fermentationem, spirituosum
 “ liquorem fundunt subtilem, fragrantem. Quin etiam odorem suum magis
 “ expandunt, eodem notante, si recenter collecti, in sp. vini rectificatissimo ma-
 “ cerentur & distillentur.” *Geoff.* ibidem. He gives them a sal essentialis vi-
 trolico-ammoniacalis ; but for what reason I cannot find.

S E C T. III.

They may be given in substance to 3i. or 3ij. if not too bulky. We have
 no preparation of them ; but they are one of the ingredients, whence the a-
 qua pæoniæ composita is distilled ; and were excluded the spiritus lavendulus
 comp. in 1744 only.

“ Florum pulvis ad 3i. aut conditum ad 3ß. exhibetur. . . . Aqua distil-
 “ lata ad 3iv. spiritus ad 3i. exhibentur.” *Geoff.* iii. 727.

L I N G U A C E R V I N A. *Vide Adianthum.*

M A J O R A N A.

S E C T. I.

Majorana, Amaracus, Sampsuchum. *Offic.* Majorana vulgaris. *B. P.* 224.
T. 199. *R. H.* 538. Majorana sive marum. *Dod.* 270. M. majori folio, ex
 semine nata, *J. B.* iii. 241. M. major. *Ger.* 664. M. vulgaris, æstiva. *Park.*
 ii. *H. Ox.* iii. 358. Origanum, foliis ovatis, obtusis, spicis confertis, compac-
 tis, pubescentibus. *H. Cliff.* 304. Sweet marjoram.

Where it grows naturally I know not ; but sown in gardens it prospers well
 enough, till the frost kills it. It flowers in Autumn. The herb, or leaves and
 tops

tops are used. " *Officin.* Folia, semen." *Schrod.* " Herba." *Pb. Lond. vet.* & *Edinb.* " Folia." *Pharm. Lond. novæ.*

" Amaracum *Diocles* medicus & Sicula gens appellavere, quod Ægyptus & Syria sampsuchum." *Plin.* l. 21. c. ii. p. 549. " Sampfucum in Cyzico ac Cyprio laudatissimum; secundum locum sibi vendicat Ægyptium. Volutur autem a Cyzicenis & Siculis Amaracum. Herba est ramosa, per terram repens, foliis hirsutis ac rotundis, calaminthæ tenuifoliæ æmulis, vehementer suaveolens & calefaciens: nexilibus coronis inferitur." *Dioscor.* l. 3. c. 47. p. 192. Canit *Virgil. Æn. lib. i. v.* 695—8.

" At Venus Ascanio placidam per membra quietem
" Irrigat: et fotum gremio Dea tollit in altos,
" Idaliæ lucos, ubi mollis Amaracus illum
" Floribus et dulci aspirans complectitur umbra."

" Et *Theophr.* 1. *Hist.* 15. *Chist.* 1, & 7. Amaracum suffrutex est, & coronaria herba, minutis foliis condita ut serpillum, &c. . . . Majoranam esse volunt." *B. P. An recte?*

" Majorana unde sit, nisi sit a Germano *Mejerohn*, nescio." *Hoffman.* 322. Majorana, quod majores habeat vires quam quis facile crederit. Amaracus ab amaraco puero quodam regio, notante servio ad Æneid. i. appellatur. " Σαμψυχον, eo quod odore hujus plantæ deliquium animi passi restituantur." *H. Ox.* " Majoranam nonnulli dictam volunt, quod majori curâ diligentiaque quam cæteræ herbæ seratur colaturque, &c. *R. H.* p. 537. " Majorana & amaracus ex a privativo, & μαραινω, marcisco, because this plant is not subject to decay, nor to rot, being naturally dry, and containing little phlegm. " Or else majorana, because marjoram (marjolame) resembles marum." *Lemery Dict.* 330. *Doctissime!*

S E C T. II.

It is a mildly stimulating aromatic; called cephalic, nervine, stomachic, uterine, &c. and is commended in all cold, phlegmatic, and flatulent diseases. It is reckoned by some a specific in lethargies.

" Calfacit & siccatur initio 3. est partium tenuium, digerit, attenuat. *Ufus præcip.* in affectibus capitis ac nervorum, hinc & uteri, & ventriculi; ciet menses (in pessario); confortat cerebrum, ejusque flatus discutit; errhina est & apophlegmatifans. *Præpar.* 1. Aqua, ex foliis recentibus. 2. Conserva, ex foliis seu summitatibus. 3. Oleum stillat. ex foliis. 4. Confectio sem. 5. Balsamus: fit ex oleo destillato." *Schrod.* 619. Antacidis, acris aromaticis, scorbuticis lenioribus & uterinis, annumeratur in *Boerb. lib. de M. M.*

1. It is of a subacid, aromatic taste, scarcely bitterish; and fragrant sweet smell. " Folia. . . . sapore acriusculo, subamaro, aromatico & grato; odore fragranti." *J. B. R. H. Geoff.* " Odoris est valde aromatici, saporis calidi, amari & acris." *Nucl. Belg.* 183. — 2. Summitatum thea is not very aromatic; dilutes syr. violarum; makes little change on solutio heliotropii, and turns

turns a solution of vitriol greenish and dark. — 3. *Analyſi chymica, ex plantæ floridæ, demptis radicibus, lbv. prodierunt humoris lbiv. 3vij. ſalis vol. urinoſi, 3i. gr. lxii. olei 3ij. 3vii. gr. lxi. carbonis 3v. 3vi. unde cinerum 3ij. 3ij. gr. xxiv. ac indi ſalis fixi alcali 3ij. gr. xxii. (ergo terræ 3ij. gr. ii.) & jactura fuit 3v. gr. lvii. (ſum lbiv. 3xv.) ſecundum Geoff. iii. 762. He adds, “ Majorana ſalem eſſentialem obtinet ammoniacalem, cum multo oleo tum tenui aromatico, tum ſpiſſo empyreumatico craſſo conjunctum. Humores craſſos & viſcidos digerit & attenuat. Partium fibras torpidas & languide oſcillantes excitat, inertium ſpirituum diſtributionem juvat, ſanguinis motum fermentativum vividiores efficit. Cerebri nervorumque meatus flaccidos & laxè ſubſidentes reſtituit & aperit. Auxiliatur cerebri & capitis frigidis morbis. Valet ad pectoris vitia: ſtomacho utilis eſt: & ad uteri ſtatus, cæteroque ejuſdem frigidos morbos confert. Urinas & aquoſos humores ducit, menſes provocat. Jecinoroſos & lienoloſos juvare dicitur. Cum cæteris aromaticis uſurpatur in affectibus capitis & nervorum, paralyſi, apoplexia, vertigine, artuum tremore, ſpasmis & atonia fibrarum nervearum, ac ſpeciatiim in catarrhis. Præ cæteris commendatur in coryza, & in olfactus læſionibus. Hartmannus, in Praxi-chymiatrica aſſerit in Majorana deliteſcere perfectum arcanum pro olfactu abolito. Ejus pulvis ad ʒi. vel ʒß. cum marmelada florum aurantiorum, quotidie mane jejuno ventriculo, tanquam expertiſſimum remedium a nonnullis exhibetur, teſte Roderico a Fonſeca.” Thus *Mr. Geoffroy* flouriſhes on one of the leaſt efficacious of the aromatics; ſometimes conſiſtently with reaſon and experience, but often not; and to expoſe his miſtakes, it is ſufficient to quote his words. He next proceeds to its virtues as an errhine; to vindicate and explain the uſe and effect of aromatic cucuphæ, (*Vide Lavendulam.*) and give the virtues of the eſſential oil, in paralytic caſes both inwardly and outwardly uſed. “ Ver- tici quoque capitis, (ſays he) illitum, reſtaurare olfactum amiſſum Etmulle- rus ſcribit.”*

“ Odoratu reſtituendo præmiſſis univerſalibus, ſpecificum eſt extractum majoranæ, ſi ſingulis diebus mane & vespere ſumitur ad ʒß. vel ʒi. Va- let etiam ſal majoranæ per ſe, aut cum extracto, ad gr. vi. vel viii. ſæpius in vino ſumptus. Itemque baſſamus ejus, vel oleum, ſi ad gr. ii. vel iv. quandoque ſumitur. Hæc penitus morbum tollunt.” *Hartman. Prax. Chym. c. 57. p. 129.*

S E C T. III.

It may be given in powder, infuſion, conſerve, or any way, ad libitum. The oleum ſtillatitium is ſeldom uſed internally, tho’ a few guttæ on ſugar can do little prejudice. The leaves are in the pulvis cephalicus, aqua pæoniæ compoſita, trochiſci hedychroi pro theriaca, unguentum nervinum; and the oleum, in the ſpiritus lavendulæ compoſitus, & ſpiritus ſalinus aromaticus. It may be uſed in ſweetbags and powders by ſuch as like them. It is a common ingredient in the ſagots of ſweet herbs uſed by cooks.

M A L A B A T H R U M.

S E C T. I.

Malabathrum, Folium, Folium Indum. *Offi.* Tamalapatrum, five Folium, cadegi *Indi*, i. e. Folium Indum, *Arabibus*. *B. P.* 409, 410. Malabathrum, & Folium Indum officinarum. *J. B.* i. 430. *R. H.* 1563. Folium Indum. *Garz. Clus.* ex. 177. Tamalapatra. *Ger.* 1534. F. Indum, five malabathrum. *Park.* 1585. The Indian leaf. — Of which formerly. Vide *Cinnamonum*.

M A L V A.

S E C T. I.

Malva, Malva vulgaris. *Offic.* Malva sylvestris, folio sinuato. *B. P.* 314. Malva sylvestris, procerior. *Dod.* 653. M. vulgaris, flore majore, folio sinuato. *J. B.* ii. 949. *T.* 95. M. sylvestris. *Ger.* 930. M. vulgaris, flore purpureo. *Park.* 299. M. vulgaris. *Park. R. H.* 599. *R. Syn.* 251. M. sylvestris, procerior, seu elatior rectave; flore majore, subrubente, aut purpureo, venis saturate purpureis picto; folio sinuato. *H. Ox.* ii. 521. Malva, caule erecto; foliis fere palmatis, obsolete serratis. *H. Cliff.* 347. Common mallow.

It grows by the way sides, walls, rubbishy places; flowering in June. The herb, flowers and seeds, are used. "*Officin.* Folia, flores, semen, radix." *Schrod.* 620. "Folia, flores." *Pb. Lond.* p. 12. The malva sylvestris, folio rotundo. *B. P.* or dwarf-mallow, is every way as good, and so is *Schroder's* malva: they may be used indifferently.

"Malva, quasi molva, quod alvum molliat, ut inquit *Festus* secundum tritum illum scholæ Salern. versiculum dixerunt malvam veteres quia molliat alvum. Gr. *μαλαγή, απο της μαλασσειν*, ob eandem rationem. Utrumque etymon improbat *C. Hoffm.* nec tamen meliora substituit." *R. H.* "Ab emolliendo ventre dictam putant Malachin." *Plin.* l. 20. c. 21. p. 534. "The name of this herb seemeth to come from the Hebrews, who call it "in their tongue malluach, &c." *Ger.* 932. It is not described by *Dioscorides*, l. 2. c. 144. p. 136.

S E C T. II.

It is antacid and emollient like althæa, with which it agrees in virtues, and is used the same way.

"Herba (folia & flores) moderate calfacit (aliis refrigerat) humectat, emollit, lenit dolores, laxat alvum, urinæ acrimoniam mitigat. *Ufus præcip.* "in affectibus pulmonum, vesicæ, intestinorum, uteri, e. gr. phthisi, tussi, raucedine, calculo, erosione vesicæ & intestinorum, in duritie uteri, febri-
Vol. II. Z bus,

“bus, &c. Extrinsecus in tinea capitis, (cum urina in lixivium cocta) in
 “tumoribus maturandis, doloribusque sedandis (cataplasm.) in alvo lenienda,
 “dolore nephritico mitigando, (clyster.) *N. B.* Semen & radix, iisdem
 “pollent viribus, sed usus rarioris sunt. Præferuntur nihilominus in medica-
 “mentis internis. Radix cocta furfures capitis cadere facit (lotione.) *Præp.*
 “Aqua stillatitia ex foliis & floribus. 2. Conserva florum, verum rari usus
 “est.” *Schrad.* p. 620. “Viribus convenit fere cum althæa, sed non est tam
 “mucilaginosa.” *Nucl. Belg.* 183.

1. They agree in taste and smell, in botanical character nearly, in their mucilaginous juice, and almost in every thing. Only whereas the root of althæa is more mucilaginous than the herb; the herb of mallows is much more mucilaginous than the root, which is woody, and here never used.—2. *Herbæ thea* is of an herbaceous subviscid taste. It does not redden syr. violarum nor tincture of turnsol. A solution of vitriol makes it brownish, precipitating little and slowly. If it stand with the herb in it 4 or 5 days macerating, it becomes very viscid and ropy. The dwarf-mallow tea gives the same phenomena, (as also that made of the flores malværoseæ, save what depends on their colour) with very little difference. In a word, not a few species, and perhaps all, malvæ alceæ, and althææ agree in virtues. One of the first is the

Malva arborea, Malva rosea. Off. Malva rosea folio rubrotundo. B. P. 315. Hollyhocks: the flowers whereof are called subastringent; and commended in tonsillarum morbis, oris putredine, in gargarism; and in fluxu menstruo nimio. (*Schrad.* 620.) But it softens and relaxes no less than the rest; and its flowers are equally mucilaginous and antacid. We make no use of it.

“Analyti chymica ex foliorum & radicum malvæ vulgaris recentium *libv*:
 “prodierunt humoris *libiv*. *3viiiß*. gr. lx. salis vol. urinosi gr. *xlviij*. olei *3ij*.
 “gr. *xlj*. carbonis *3iv*. unde cinerum *3i*. *3vii*. gr. *xxvi*. ac inde salis fixi al-
 “cali *3vi*. gr. *lxii*. (ergo terræ *3viiiß*.) & jactura fuit *3ij*. *3i*. gr. *lxvi*.” secun-
 “dum *Geoff.* iii. 768. Hence in the analysis malva differs considerably from
 “the althæa. But so does also the analysis corticis radicum althææ, from that
 “foliorum & summitatum. *Geoff.* iii. 69. So that no proof can thence be drawn
 “against their agreeing in virtues. “Malva has the same virtues with althæa.”
 “*T. Hist.* p. 212. “Malvæ succus chartam cæruleam non mutat nonnihil (rather
 “valde) glutinosus est, & saporem herbaceum fatuum tantummodo refert. Sa-
 “lem essentialem obtinet ammoniacalem.” &c. *Geoff.* iii. p. 768—772. &
 “*R. H.* p. 599.

We have a conserva florum malvæ. The folia are in the decoctum com. pro clystere, & decoctum emolliens pro fotu.

LECTURE LVIII.

MARRUBIUM.

SECT. I.

Marrubium, Marrubium album, Prasium, Prasium album. *Off.* Marrubium album, vulgare. *B. P.* 230. *T.* 192. *Park.* 44. *H. Ox.* iii. 376. Marrubium. *Dod.* 87. *M. album.* *J. B.* iii. 316. *Ger.* 692. *R. H.* 556. *Syn.* 239. *M. five prasium album.* *Tab. Ic.* 539. Marrubium denticulis calycinis fetaceis, uncinatis. *H. Cliff.* 312. Common white horehound.

It grows by the way sides, and in rubbisy places; flowering in June. The leaves are used; or the herb before it flowers: and *why not in flower?*—" *Offic.* "Folia sola." *Schrod.* 621. & *Ph. Lond.* p. 13. "Herba." *Ph. Lond. veter.* *Ph. Edinb.* Dale, &c. "Marrubium plerique inter primas herbas commendavere, quod Græci prasion vocant . . . notius quam ut indicandum sit." *Plinius* l. 20. c. 22. p. 536. l. 23. — "Genera sunt duo. *Theophr.* 6. *Hist.* 1, & 2. proposuit: aliud folio herbido, incisuris profundioribus, quo unguentarii utuntur: alterum rotundius squalens, incisuras habens obscuriores, (prasium innuere videtur)." *B. P.* "Sunt & *πρασιν* duo genera. Aliud enim folio herbido, ferratori, incisurisque profundioribus, & proinde conspectioribus discreto constat, quo unguentarii uti ad nonnulla consueverunt: alterum rotundius, squalensque vehementer, sicut *σφαλες* (*αἰλεδισφαιες*) incisurasque habens obscuriores, minusque ferratum." *Theophr.* l. 6. *Hist.* c. 2. p. 550. "Marrubium (*πρασιν*) frutex est ab una radice ramosus, sub-hirsutus, candidans, virgis quadrangularibus: folium pollicem æquat, subrotundum, villosum, rugosum, gustu amarum. Semen est in caulibus ex intervallis: flores verticillato ambitu asperi. Nascitur circa domorum areas." *Dioscorides*, l. 3. c. 119. p. 223. Hence our horehound is not improbably the *πρασιν* (not *πρασινον*) and marrubium antiquorum.

"Marrubium dicitur forte a loco natali. Marrubii enim fuerunt populi Italiæ, circa Fucinum lacum habitantes, a rege Marrubio denominati, vel quod circa mare habitarent. Aliis vero marrubium vocatum propter amaritudinem." *H. Ox.* iii. 375. Marrubium dictum putatur, quod tabidis & marcescentibus conducatur. . . . Vel quod folia marcida & squalentia sint quasi rubigine exesa. *J. Bod. a Stapel.* *R. H.* 555. "Marrubium comes, as it is said, from the Hebrew word *Marrob*, which signifies a bitter juice." *Lem. Diet.* 340.

"Utuntur officinæ Græca potius appellatione. Hinc natus est commilitonibus Patavinis hic jocus. Stabant inter rhizotomas, quæ ex Euganeis venum exponunt herbas, & admoto naribus marrubio albo: ei, inquam, marrubium album? cui adstans pharmacopœus in aurem, ei signore, prasio!" *Hoffman.* p. 330.

S E C T. II.

It is a stimulating and deterfive deobstruent, and diaphoretic; called pectoral, stomachic and uterine; and is commended in obstructions of the viscera, in the asthma, jaundice, green-sickness, &c. also for worms.

“Calfacit 2. siccat 3. aperit, abstergit, attenuat, saporis amari. *Ufus Præcip.* “in obstructionibus pulmonum, epatis, lienis, uteri, adeoque in phthisi, in expuitione sanguinolenta, in partu difficili, lochiisque remoratis. *Extrin-* “secus usus ejus rarior est.” *N. B.* “Vesicæ & renibus censetur noxium; “correctum tamen glycyrrhiza ac passulis nihil nocere dicitur. *Præp.* 1. Aqua “stillat. ex integra planta. 2. Syrupus de prassio. 3. Species diaprassii.” *Schrod.* 621. Vide *Dioscorid.*

1. It is of a subacid and bitter taste, and a strong somewhat-aromatic smell. “Folia sunt sapore acri & amaro. Tota herba Dodonæo suavis & “grati est odoris, & nonnihil moschum redolet, præsertim hybernis mensibus.” *J. B.* “Odor totius plantæ vehemens, & nonnihil gravis.” *R. H.* “The “leaves are very bitter, and of a penetrating scent: they do not redden the “blue paper. The natural salt of the earth (which is bitter, and composed “of sea salt, sal ammoniac and nitre) in this plant seems to be united with a “considerable quantity of sulphur, phlegm and terrestrial parts. By a chymical analysis it gives much acid phlegm, much oil and earth, a little urinous “spirit, volatile salt, and fixed salt (peu lixiviel).” *T. Hist.* p. 115.—2. Summitatum & foliorum thea is of a very bitter taste, with a flavour somewhat like that of camomile, (as indeed the scent is also). It redned a little a solution of turnsol; but a few drops ol. tartari added to the mixture made it blood red. Solutio vitrioli turned it to a dark sea green, and soon and plentifully precipitated. After some weeks maceration, it turned putrid and abominably fetid. — 3. It is commended for coughs, consumptions, scirrhus spleens, female obstructions, hard labour, &c. but is said to hurt the urinary passages. “Sed quomodo renibus est inimicum apud Dioscoridem & Plinium? “Frequenti usu exulcerat. Multo minus utendum in iis, in quibus jam ulceratæ sunt partes illæ.” *Hoffman.* 331. If so, surely it is not proper in a hæmoptoe or empyema: yet it is much milder than helenium. That ever a scirrhus hepatis or lienis was cured by it, I very much doubt. Vide *R. H.* & *Geoff.* iii. 816. It may do service in some jaundices. “R. syr. de prassio ℥ij. “ol. tartari p. d. ℥i. M. sumat æger per intervalla frequentia cochl. i. Medicamentum est ad icterum nulli secundum.” *R. H.* Soap is better. “Analyti chymica ex foliorum, a stipitibus mundatorum, & summitatum “floridarum lbv. prodierunt humoris lbiii. ℥xiii. zi. gr. xviii. salis vol. uri- “nosi gr. xx. olei ℥ij. gr. xii. carbonis ℥ix. zvii. gr. liv. unde cinerum ℥iv. “zv. gr. xxiv. ac inde salis fixi mere alcali ℥i. ziii. gr. xv. (ergo terræ ℥ij. “zj. gr. ix.) & jactura fuit ℥v. zvi. gr. xl.” Secundum *Geoff.* iii. 815. Yet he owns chartam cæruleam non mutat: altho’ by the analysis all the humores, to the last ℥ij. were obscurely acidi at first, then magis ac magis acidi.

“Marrubii albi succus, vel infusum ex vino, vel decoctum ex aqua a Fo- “resto, Freitagio, Zacuto Lusitano, & Hartmanno, in hepatis obstructioni- “bus,

“bus, vel etiam scirrhis, in ictero, in hydropo icterum subsequente com-
 “mendantur. *J. B.* Chomel observat duos ægrotantes a scirrho hepatis libe-
 “ratos fuisse ab infuso foliorum marrubii albi *M. 1.* in vini albi ℥viii. quo-
 “tidie mane, per aliquot menses, epoto. . . . *Forestus* asserit nonnullos stru-
 “mis affectos diuturno usu syrupi de prasio simplici, seu ex succo recenti cum
 “saccharo parati persanatos fuisse, multis aliis remediis antea frustra tentati.”
Geoff. iii. 816. 818.

S E C T. III.

It may be given in powder to ʒi. or ʒij. in infusion to ℥℥. and the juice to ʒi. It is an ingredient in the theriaca Andromachi. No preparation of it is made here.

“Syrupus de prasio Mesuæ, egregie asthmati antiquo servit, pleuritidi sup-
 “purato, &c. sed valde calidus est. . . . *Diaprasin Nicolai* confusio potius est
 “quam compositio, cui ideo præfero *Pauli* compositionem ex *l. 7. c. 11.* in
 “empyematicis & tabidis, quibus singulariter & mirifice utile esse scribit
 “*Dodonæus.* Ab hac parum variat *Tralliani l. 5. c. 4.* ut et *Aetii l. 8. c. 54.*
 “Non minus efficax est oxymel. *Gal. 13. Meth. 18.*” *Hoffman. 331.*

M A R U M.

S E C T. I.

1. Marum, Marum vulgare. *Off. Marum. Lob. 265. Ger. 670. R. H. 520.*
M. vulgare. Park. 12. H. Ox. ii. 372. M. vulgare, sive Clinopodium. Dod.
271. Sampsuchus, sive Marum mastichen redolens. B. P. 224. Clinopodium
quibusdam, Mastichma Gallorum. J. B. iii. 243. Mastichma. B. J. 156.
Tragoriganum. i. Gluf. H. 355. Thymbra Hispanica majoranæ folio. T. 197.
Thymus, verticillis lanuginosis; dentibus calycinis setaceis, pilosis. H. Cliff.
306. Herb-mastick, or mastick-thyme, by some also called marum. R. H.

It grows in Spain in dry and stony places. In gardens it flowers in July. Frost sometimes kills it. The herb, rather the leaves and tops are used. “Fo-
 “lia.” *Pb. Lond. 13.* Some make marum a synonymum majoranæ. Vide
Hoffman. p. 322. “Marum planta est exotica majoranæ in facultatibus &
 “figura similis, adeo ut pro una eademque herba a nonnullis habeatur.
 “Quamobrem cum maro hisce in regionibus destituamur majoranam, vel dic-
 “tamnum creticum substituere solemus. *Præp. Pilulæ marocostinæ Mindere-*
“ri. Vide l. 2.” (p. 268.) Schrod. 621. And this is all he says of it. It
 differs widely from both these plants. But that it is the maron antiquorum
 I cannot say; tho’ it is used for it in magma hedychroi pro theriaca. “Ma-
 “ron seu ὤσσηρον, herba vulgo cognita, furculosa, flore organi, attamen foliis.
 “multo candidioribus, ac flore odoratiore.” *Dioscorides l. 3. c. 49. p. 193.* So
 that this is rather the

2. Marum Syriacum. *Off. Marum Cortusi. J. B. iii. 242. R. H. 527. H.*
Ox. iii. 420. (quoad discr. at figura vitiosa). Tragoriganum alterum. Lob.

263. *Adv.* 211. *Tragoriganum latifolium*. *B. P.* 223. *T. Lobelii*. *Ger.* 668. *T. latifolium*, five marum Cortusi Matthiolo. *Park.* 16. *Chamædrys-maritima*, incana, frutescens, foliis lanceolatis. *T.* 205. *Teucrium foliis ovatis*, utrinque acutis, integerrimis, floribus solitariis, spicatum digestis. *H. Cliff.* 303. Goats-marjoram. *G. P.* Syrian herb-mastick, or mastick-thyme, vulgo marum syriacum. “Marum syriacum *Offic. Ger.* emac. 670. *M. syriacum* vel “creticum. *Park.* 13. *H. L.* 409. Marum creticum. *Alpin.* ex. 288. Majorana syriaca vel cretica. *B. P.* 224.” *Dale.* p. 145. Sed hæc non sunt synonyma hujus plantæ: & in synonymis hallucinantur. *H. Ox. B. J. Miller Bot. James Ph. Universalis.* (edit. 1747. in 8vo.) p. 367. errs in both his synonyma, copying Miller implicitly.

It grows in Spain. In our gardens it flowers in July, and can endure our common winters: but must be defended from cats, which are apt to destroy it, as soon as they find it. Some make it *tragoriganum*, or *tragoriganum alterum Dioscoridis*. “*Tragoriganum alterum gracilibus est furculis, exilioribusque foliis: quod etiam prasion aliqui vocavere.*” *Dioscor.* l. 3. c. 35. p. 187. But as it is not the first evidently; so this description of the other is too short for a probable conjecture. Our plant agrees better to his description of the marum, (if it could be said to have flowers like *origanum*; so *majorana* bids fairer for being the marum *Diosc.* than either of these two marums.) Hence it is the marum verum, marum Cortusi. *Off. Geoff.* iii. 821. who says “*Frequens est in stæchadum (yeres) unâ quæ vocatur Pomponia, Gallis Porte-croz.*” “*Hic in hortis colitur. Folia & summitates floridæ in usum veniunt.*” The herb is used according to *Dale, Pharm, Edinb. and Lond. Vet.* Folia tantum, in the *New Pharm. Lond.* But the leaves, young shoots and flowers may be taken.

The common marum is of a subacid, aromatic taste, and fragrant, betwixt lavender and serpillum. “*Folia sapore acri prædita, odore grato, sed paulo vehementiore.*” *R. H.* The *m. syriacum* is acrid, pungent, and as bitter as wormwood; and has a pungent, yet pleasant aromatic scent. “*Saporem amaro & acri, odore grato.*” *R. H.*

S E C T. II.

1. Mastick-thyme is a stimulating aromatic (sicut *lavendula*), so an attenuating diaphoretic; called cephalic: and is commended in diseases of the head and nerves; though used here only in trochisci hedychroi.

2. The marum syriacum is vastly more acrid and pungent, yet agreeably aromatic, also subastringent: and so may be of signal use in cold phlegmatic indispositions; or wherever strong bitters, or acrid aromatics are proper.

“*Marum occurrit affectibus frigidis & humidis. Incidit, attenuat, aperit, digerit, lentorem corrigit, & obstructions referat. Diureticum, carminativum, antiscorbuticum est remedium. Inter remedia cephalica excellit. Recipitur in theriacam cœlestem.*” *Boecler. Cynof.* ii. p. 349. “*Marum Cortusi. J. B.* Virtutes easdem habet ac marum. Feles quoque & hac planta mire delectantur. Est sapore amaro & acri, odore grato.” *Boecler. Cyn.* iii. 230.

1. Marum tea is of an orange colour, almost aromatic, with the flavour of lavender: it reddens a little the sol. heliotropii; and with solutio vitrioli becomes green, dark, and opaque, precipitating soon and plentifully. But—2. Mari syriaci thea is very little tinctured, of a biting bitter taste, with somewhat of the flavour of scurvy-grass and wormwood, and pungent scent. With sal vitrioli it turns of a dark bluish-green colour, opaque, and precipitates more slowly and less than the former: in other things they agree. “Mari veri folia sunt sapore, acri & amaro, odore vehementi & aromatico, grato, qui subito cerebrum petit, & sternutationes movet.” *Geoff.* iii. 821. “This plant is very friendly to nature; the leaves when rub’d emit an odour, which affects the brain like volatile salt, but in summer, when scorched, and as it were burnt by the heat of the sun, yields no smell at all, tho’ rubbed never so vehemently. (I found it here always as odoriferous in summer as in winter; and do not see whence he draws what follows). Hence it appears to contain an acidulous volatile salt, and that nothing in art or nature affords the like.” *James Disp.* p. 367. See *Boerb. Hist. Plant.* p. 262. — 3. “Analyti chymica ex foliorum & summit: floridarum ꝑxxxv. prodierunt humoris ꝑxxxvi zi. olei ꝑziß. carbonis ꝑiv. unde cinerum ꝑix. gr. xii. ac inde salis fixi alcali ꝑiij. gr. xxiv. (ergo terræ ꝑv. gr. lx.) & jactura fuit ꝑiij. ꝑiij.” (sum. ꝑxxxv.) Secundum *Geoff.* iii. 821. Who gives it (viz. marum verum) a sal essentialis tartareus, and also a sal volatilis, tum acidus tum urinosus, multo oleo conjunctus; says it reddens the blue paper; and is too much commended by Widelius. “Eadem vires ipsi quæ M. Cort. tribuuntur: sed rarioris est usus.” *Geoff.* iii. 824.

M A T R I C A R I A.

S E C T. I.

Matricaria, Parthenium. *Off.* Matricaria, vulgaris, seu sativa. *B. P.* 133. *T.* 493. Matricaria. *Dod.* 35. *Ger.* 652. *R. H.* 357. *Syn.* 187. *M. vulgo* minus Parthenium. *J. B.* iii. 129. *M. vulgaris*, simplex. *Park.* 83. *M. vulgaris*. *C. B. P. H. Ox.* iii. 52. Matricaria, foliis compositis, planis; foliolis ovatis incis; pedunculis ramosis. *H. Cliff.* 416. Common feverfew.

It grows by hedges, in rubbishy places, &c. in England &c. flowering in June and July. The herb, or leaves and flowering tops are used. “*Officin.* Herba cum floribus.” *Schrod.* 622. “Herba, flores.” *Pb. Edinb.* “Folia.” *Pb. Lond.* Is it the Parthenium Dioscoridis?

“Parthenium aliqui amaracon, alii leucanthemon vocant; foliis est coriandri, tenuibus, floribus per ambitum albis, in medio vero melinis, odore subviroso, & sapore subamaro.” *Dioscor.* l. 3. c. 155. p. 236. “Parthenium, alii leucanthen, alii tamnacum vocant. . . . Nascitur in hortorum sepius, flore albo, odore malo, sapore amaro.” *Plin.* l. 21. c. 30. p. 565. Both make it purgative. Vide *Hoffman.* p. 331. “Παρθενιον, quasi virginalis, quod morbis mulierum uterinis medeatur, (hinc vulgo matricaria) *Dioscor.* l. 3. c. 155. cui & ἀμαρανόν, ut & Galeno & Aeginetæ. Plinius & Artemisii. l. 25. c. 6. & mercuriali. l. 25. c. 5. & huic l. 21. c. 30. Parthenii nomen tribuit.” *B. P.*

S E C T.

S E C T. II.

It is a stimulating and deterfive or saponaceous deobstruent and diuretic; called uterine; and commended internally in female obstructions, retention of the secundines, in hysteric fits, flatulent and nephritic colics, agues, worms, dropsy, &c. and outwardly as emollient and anodyne. It is somewhat more acrid than camomile, tho' more viscid.

“Calfacit 3. siccat 2. attenuat. *Ufus præcip.* in affectibus uteri frigidis ac flatulentis, in obstructionibus mensium, in impotentia veneris, in hydropse (purgat per urinam, nonnunquam & per alvum) &c. in febribus putridis, in calculo renum, in vertigine. Extrinsecus in suffocatione matricis, (decoctum cum aceto naribus applicatum), in mensibus ciendis, (pessar.) in duritie mammarum, (catapl.) in æstu febrili mitigando, fricando dorsum in arthritico dolore sedando, &c. *Præpar.* 1. Aqua stillatitia, ex integra herba. 2. Sal communis, ex cinere. 3. Syrupus de matricaria. 4. Oleum stillatitium: raro exstat.” *Schrod.* 622. Antacidis, acribus aromaticis, & uterinis, adnumeratur in *Boerb. lib. de M. M.*

1. It is of a very bitter and nauseous taste, and strong heavy smell. “Folia odore gravi, sapore amaro.” *J. B.* “The scent is strong and stuffing, and taste very bitter.” *Park.* “Odoris est fortis aromatici, accedentis ad tanacetum; saporis valde amari & calidi.” *Nucl. Belg.* 189. — 2. Herba thea is not altogether so much tinctured as that of chamomile: but more viscid and subturbid, and of a very bitter and more nauseous taste: otherwise it agrees with chamomile tea. — 3. It is avoided by bees and flies. *Vide R. H.* 357. So is probably a vermifuge. “Ventriscæ tæniæ expellit, vel herba ipsa, vel succus expressus, non secus ac centaurium aut absinthium.” — 4. Externally it is commended for hard tumors, (sc. mammarum, &c.) for the gout, for pains of the head. (*Vide R. H.*) Applied to the wrists with salt, it is said to stop an ague. — 5. “Analyti chymica ex foliorum & summitatum recentium matricariæ lbv. prodierunt humoris lbiv. 3vii. 3iß. salis vol. urinosi 3i. gr. xlii. olei 3j. 3vi. gr. lx. carbonis 3iv. 3vi. gr. xxiv. unde cinerum 3ij. 3iiij. ac inde salis fixi alcali 3ix. gr. xlv. (ergo terræ 3ix. gr. xxvii.) & jactura fuit 3ij. gr. xii.” *Secundum Geoff.* iii. 825.

“Succus foliorum colorem subrubrum chartæ cæruleæ affert. Salem essentiali obtinet hæc planta ammoniacalem, cum multo oleo, tum tenui essentiali, tum crasso fœtente confociatum. Inter plantas hystericas insignem locum occupat. . . . Mihi, inquit Simon Paulli, frequenti in usu est, si lochia post partum negotium faceffant mulierculis. Parare enim ex ea & floribus chamomillæ cum tantillo artemisiæ decoctum consuevi, a cujus usu hysterica symptomata illico cessare, & lochia abunde fluere sæpe comperi. Quod medicamentum licet non jucundum aliis, hystericis tamen correptis passionibus, veluti sesamo ac papavere sparsum apparet; quæ ab illius usu ex lethargo excitatæ, in vitam, Deo benedicente, veluti redire conspici solent. . . . Externe præscribitur in fomentis cum chamomilla decocta, in uteri inflatione & doloribus post partum, lochiorum remora, mensiumque fluxu doloroso quarundam mulierum.” *Ibid.* p. 826. It is commended

ed also in the gout, vertigo, in impotentia, &c. "The juice to the quantity of ℥ij. given an hour before the fit, is good for all kinds of agues." *Miller Bot.* 288. Vide *Sim. Paulli Q. B.* p. 390.

S E C T. III.

It may be given in powder to ℥i, in infusion or decoction to ℥℥, the juice to ℥ij. It is an ingredient in the aqua bryoniæ composita.

"Ad uterinos affectus plurimum conducit, vel pulverata a ℥℥. ad ℥ij. vel ejus succus expressus & defæcatus, ad ℥i. vel alteram. Sicut infusum aut decoctum ad ℥vi." *Geoff.* iii. 826. "Iis qui purgare nolunt, oppono sapientes mulieres Tragi (i. *Hist.* 50.) quin sapientissimum medicum Brasavolam, in exam. simpl. qui dosim statuit succi ℥iv. Sed quid purgat? Pituitam & atram bilem. Experientiæ addo rationem validam. Quæ tam potenter deobstruunt, in justa dosi simul purgant." *Hoffman.* 332.

M E L I L O T U S.

S E C T. I.

Melilotus. *Offic.* Melilotus officinarum Germaniæ. *B. P.* 331. *T.* 407. Melilotus Germanica. *Lob.* 501. *Ger.* 1215. *M. vulgaris.* *Park.* 718. *R. H.* 951. *Syn.* 331. Trifolium odoratum, sive melilotus. *Dod.* 567. *T. odoratum,* sive melilotus, vulgaris, flore luteo. *J. B.* ii. 370. *T. odoratum,* seu melilotus, fruticosa, lutea, vulgaris; vel officinarum. *H. Ox.* ii. 161. Trifolium, floribus racemosis; leguminibus nudis, dispermis; caule erecto. *H. Cliff.* 376. Common melilot.

It grows in hedges, among corn, &c. in England, flowering in June and July, the second year. The herb (rather leaves) and flowers are used. "Flores, seu integra herba, semen." *Schrod.* 622. What the μελιλωτος *Dioscoridis* l. 3. c. 48. p. 192. and meliloton *Plinii* l. 21. c. 9. p. 648. was, I know not; but surely not this plant, which by no means is croco similis.

S E C T. II.

It is diluent, emollient and diuretic; called pectoral and anodyne; and commended in coughs, colics, nephritic pains, &c. but used almost only externally, for pains, inflammations and tumors, in cataplasm, fomentation, plaister, and clyster. The dose is ad libitum. It gives name to a plaister.

"Calfacit 1. emollit, discutit, dolores mitigat. Usus creberrimi præcipue extrinsecus, in doloribus, tumoribus, oculis rubicundis, in clysteribus, &c. *N. B.* Quoties simpliciter meliloti fit mentio, semen recipiendum. *Præpar.* 1. Aqua stillat. ex herba cum flore. 2. Emplastrum de meliloto." *Schrod.* 622. Aquosis subfarinosis emollientibus, & stimulantibus aromaticis accensetur in *Boerb. lib. de M. M.*

1. It is of an herbaceous, fat, bitterish and somewhat unpleasant taste, and soft honey-smell; when dried it is most fragrant. “Flores odore suavi mel-
 “lito.” *J. B.* “Semina sapore leguminoso. . . . Nullum fere odorem vi-
 “rens habet, sed cum aruerit fragrantissimum.” *Vide R. H.* “Odoris le-
 “niter aromatici, accedentis ad sænum-græcum, saporis herbaceo-legumino-
 “si.” *Nucl. Belg.* 190. “This plant reddens very little the blue paper: it is
 “acid, bitter, styptic, odoriferous, and causes slight nausea when well
 “chewed: which makes it probable that its salt resembles much the natural
 “salt of the earth, united to much essential oil, and terrestrial parts: for by a
 “chymical analysis, melilot, besides a great deal of acid phlegm, gives also
 “much oil and earth, a considerable quantity of urinous spirit and volatile salt,
 “and of fixed alkali salt. Hence it is aperient, resolute and anodyne.” *T. Hist.*
 p. 117. — 2. *Herbæ thea* is of a straw colour, leguminous taste, and little smell:
 it reddens a little the solutio heliotropii; and turns of a dark brownish col-
 our, but pellucid, on the affusion sol. vitrioli, precipitating little and slowly.
 In 7 days it began to ferment: and in 2 or 3 weeks was as viscid as whites
 of eggs. — 3. The aqua florum stillatitia is not very odoriferous; but *Cæsal-*
pinus observes, that mixed with other aromatics it increases their perfume,
 and makes it more durable. *Vide J. B.* ii. 271. *T. Hist.* p. 118. “Aqua flo-
 “rum meliloti odorata servatur in officinis, sed rarioris est usus. Ad odora-
 “menta sæpius usurpatur: cæterorum odoramentorum fragrantiam, tenuitate
 “sua evehit & expandit.” *Geoff.* iii. 836. — 4. It feeds cattle. Hence in Italy
 it is called *Trifoglio cavallino*; “quod ejus pabulo maxime delectantur equi.”
Matth. p. 809. “Apud nos etiam in Anglia subinde feritur, pro equorum
 “& jumentorum pabulo.” *R. H.* 951. — 5. It is much commended outward-
 ly, as emollient, discutient and anodyne; and inwardly also by some, in in-
 flammations of the guts, obstructions of urine, rheumatism, (*T. Hist.* l. c.)
 Fluor albus, (*Geoff.* iii. 835.) tympanitis, (*Nucl. Belg.* l. c.) &c. But little
 used thus. “Interne inter expectorantia recensentur flores; potior tamen eo-
 “rum usus est externus; discutiunt, emolliunt, dolores mitigant: hinc in in-
 “flammationibus quibusvis, præcipue uteri, ani, testium, ut & in doloribus
 “nephriticis & podagræ conveniunt.” *Herman. Cyn.* p. 596. *Boeclerus* adds,
 “Adhibetur melilotus in clysteribus & decoctis ad hydropem, pleuritidem,
 “stranguriam, obstructionem mensium, ut & venena. Prodest quoque in flu-
 “ore albo. Decoctum meliloti laudatur insigniter ad dolores post partum, at-
 “que etiam ante partum, mitigandos.” *Ibid.* p. 597. It is certainly a mild
 and safe plant. Anne cum galega convenit?

“Analyfi chymica, ex meliloti floridi, demptis radicibus, lbv. prodierunt
 “humoris lbiv. 3iv. 3v. salis vol. urinosi 3ß. olei 3i. 3vii. gr. liv. carbonis 3v.
 “3ij. unde cinerum 3i. 3vi. gr. lx. ac inde salis fixi alcali 3ij. gr. xlv. (ergo
 “terræ 3xii. gr. xv.) & jactura fuit 3iv. gr. xviii.” *Secundum Geoff.* iii. 834.
 who gives it a sal essentialis tartareo-vitriolicum ammoniacalem.

“Paratur in officinis emplastrum de meliloto Mesuæ; quod quidem pitui-
 “tam viscidam egregie discutit, resolvit, & dolores apprime sedat; tumores
 “emollit, & nonnunquam maturat.” *Geoff.* iii. 836. And thus ends his third
 and last volume. The emplastrum de meliloto Mesuæ, (*Pharm. Aug. Zwelf.* p.
 381.) is a perplexed composition: *ours* is simple enough, consisting of melilot,
 tallow, wax and refine, only, and as good as Mesuæ’s, tho’ it has 20 more in-
 gre-

gredients than ours. The *New London Dispensatory* has thrown out the melilot also, not allowing it so much as a place in the M. M. and call the plaister, emplastrum attrahens, (vide *Narrative of the Committee*, p. 122.) which is substituted in place of the melilot plaister, and consists of cera, and resina flavæ p. iii. and sevi ovilli p. i. only. Is it preferable to the melilot plaister? — Our “empl. cereum is R. ceræ flavæ lbiv. resinæ albæ, sevi ovilli āā. lbij. liquefact in emplastrum. Quod vicem supplet empl. e meliloto.” Thus *Pb. Edinb.* (an. 1756.) slavishly imitate!

M E L I S S A.

S E C T. I.

Melissa. Melissophyllum, Apiastrum. *Officin.* Melissa hortensis. *B. P.* 229. *T.* 193. Melissa. *Dod.* 91. M. vulgaris, odore citri. *J. B.* iii. 232. *H. Ox.* iii. 408. Melissa. *Ger.* 689. *R. H.* 570. M. vulgaris. *Park.* 40. Apiastrum, sive Melissophylon. *Lob.* 277. Melissa, floribus ex alis inferioribus ferme sessilibus. *H. Cliff.* 307. Common (or garden) baulm, or bawm.

It grows naturally in Italy. In gardens it flowers in July. “Circa Genavam vidit spontaneam in sepibus J. Bauhinus. Floret Junio, Julio & Augusto,” *R. H.* The herb is used: “Folia.” *Pharm. Lond.* 13. “Herba, & flores.” *Dale* 155. “Pro officinis colligenda est tempore verno, & extra florem, ad quem ubi pervenit, jam cimices olet.” *Hoffman.* p. 334. I have not observed this fœtor, but it smells sweeter, before than after it flowers.

“Apiastrum (μελισσοφυλλον) quod aliqui μελλιπταιναν vocant, quoniam apes ea herba delectantur, foliis & cauliculis ballotæ similis est, attamen majoribus & tenuioribus, neque ita hirsutis, citreum vero malum redolentibus.” *Dioscor.* l. 3. c. 118. p. 222. “Melissophyllo sive melittidi si perungantur alvearia, non fugiunt apes. Nullo enim magis gaudent flore.” *Plin.* l. 21. c. 20. p. 561. “Apiastrum Hyginus quidem melissophylon appellat; sed in confessa damnatione est venenatum in Sardinia.” *Plin.* l. 20. c. 11. p. 522. Here he confounds it with another plant; “Melissophyllon quod apiastrum vocamus.” *Plin.* l. 21. c. 9. p. 648—100. *Virgil* calls it Melisphylla:

— — — — — “Jussos adsperge fapores,
“Trita melisphylla, & corinthæ ignobile gramen.”
Georg. iv. v. 62.

S E C T. II.

It agreeably stimulates; is said to comfort and chear the spirits; is called cordial, cephalic and uterine; and is commended for lowness of spirits, palpitation of the heart, fainting, loss of memory, vertigo, apoplexy, palsy, epilepsy, mania, barrenness, female obstructions, &c.

“Calfacit 2. siccat 1. usus magni est in affectibus cephalicis, cardiacis, uterinis; hinc et in stomachicis, adeoque in melancholia, somnis turbulentis, paralyfi, apoplexia, epilepsia, vertigine, lipothymia, cruditate ventriculi, remoratis menibus & lochiis puerperarum, suffocatione uteri: emendat insuper foetorem anhelitus. Extrinsecus in uterinis balneis, cataplasmatis, in ictibus venenatis, apum, vesparum. *Præpar.* 1. Aqua stillat. ex herba integra. 2. Oleum, ex herba sicca: raro extat. 3. Extractum, ex foliis. 4. Conserva, ex floribus. 5. Syrupus simplex, ex succo. 6. Syrupus compos. Fernelii.” *Schrod.* 622. Est ex aribus aromaticis, scorbuticis lenioribus, & roborantibus, in rachitide propriis. *Boerb. lib. de M. M.*

1. It is of a soft, and somewhat aromatic taste, and fragrant lemon-smell; which is lessened by bruising, and quite lost in drying. “Folia odore citri, sapore acrimonia aliqua linguam feriente.” *J. B.* “Odoris est grati fere ad instar citri; saporis subacris & calidi.” *Nucl. Belg.* 191. The distilled water is but weak nevertheless, and it yields little essential oil. But — 2. It is perhaps too much commended. “Dixerat Paracelsus, sibi experimentis scitum, in melissa hospitari virtutem prorsus propriam, specificatim dicebat, quæ insinuans se humoribus corporis humani, instauraret iis jam senilibus novum juventæ vigorem, hacque ratione podagram extirpare radicitus. Paria bonus *Isaacus Hollandus* promiserat. Si vera sunt virorum dicta, crediderim me hac arte exhibiturum compendio unitas vires fortissimas, hujus herbæ in hac aqua, cujus in meipso pulcherrimos effectus deprehendi, jejuno ventriculo potæ. Sane in melancholicis, hypochondriacis, hysterics, chlorosi laborantibus, palpitationi cordis obnoxiiis, quoties mala hæc a spirituum perturbatione magis, quam a materiæ morbificæ mole aggesta pendent, vix par remedium reperies, quamvis pretiosum sit satis.” *Boer. Chem.* ii. *Proces.* 16. Also in acuendo ingenio, for hard labour, retentis secundinis, (*R. H.*) flatulencies, dimness of sight, &c. “Febure primum ens melissæ mire prædicat, quo aniculam juventuti restituisse affirmat.” Vide ejus *Chym. part.* 2. p. m. 221. &c. & *Herman.* p. 457. *Credat qui vult.*

S E C T. III.

It may be used any way ad libitum. The aqua stillatitia is the only preparation in use here. It is one of the ingredients of the aqua alexiteria, aqua mirabilis, aqua melissæ, troch. cardialgici. But elsewhere conserves, syrups, compound spirits are prepared with it. Some use it by way of tea. The aqua melissæ composita is a famous drachm in many parts. Vide *James Pharm.* p. 643.

M E N T H A.

S E C T. I.

1. *Mentha.* *Mentha fativa*, *Mentha spicata.* *Offic.* *Mentha vulgaris.* *Ph. Lond.* *Mentha angustifolia*, *spicata.* *B. P.* 227. *R. H.* 532. *M. spicata*, folio longiore, acuto, glabro, nigriori. *J. B.* iii. 220. *M. romana*, præstantior, an-

angustifolia. (*Lob.* 271?) *H. Ox.* iii. 367. Our common garden-mint, or spear-mint.

But *mentha spicata*, folio longiore, acuto, glabro, nigriori *J. B.* is the *mentha sylvestris*, longioribus, nigrioribus, & minus incanis foliis, *B. P.* 227. according to *T.* 189. and *Vail. Bot. Par.* 125: And *mentha, angustifolia spicata*, glabra, folio rugosiore, odore graviore, *R. Syn.* 233. according to *Dillenius*. In a word, in thy synonyma *menthæ angustifoliæ, spicatæ, B. P.* The greatest Botanists, Ray, Morison, Sutherland, B. J. Dale, Vaillant, yea Linnæus, seem all to err, and also to differ amongst themselves, tho' this is the synonymum given in the *London Dispensatory*; which, if it be the plant there designed, is the *mentha tertia Dod.* 95. and has "folia oblonga ad falicis formam accedentia, sed candidiora molliora, & hirsutiora." *Dod.* But if the *mentha angustifolia spicata, B. P.* in *R. H.* and *H. Ox.* it has, "Folia oblonga, acuta, atro-virentia, minus hirsuta, per ambitum serrata; & florum pusillorum exalbidorum, punctulis rubentibus guttatorum verticilli longiuscula serie, spicam effigiant." *J. B. R. H. H. Ox.* which are evidently different species.

2. *Mentha aquatica, Sisymbrium. Officin.* *Mentha rotundifolia, palustris, seu aquatica major. B. P.* 227. *T.* 189. *H. Ox.* iii. 370. *M. aquatica sive Sisymbrium. J. B.* iii. 223. *R. H.* 533. *Syn.* 233. *Ger.* 684. *M. aquatica rubra. Park.* 1243. *Sisymbrium. Dod.* 97. *Mentha floribus capitatis, foliis ovatis, serratis, petiolatis. H. Cliff.* 306. Water-mint.

3. *Menthastrum, Mentha caballina. Officin.* *Mentha sylvestris, longiore folio. B. P.* 227. *T.* 189. *H. Ox.* iii. 367. *Menthastrum. Dod.* 96. *Menthastrum. Ger.* 684. *Menthastrum spicatum, folio longiore candicante. J. B.* iii. 221. *R. H.* 532. *Syn.* 234. *Mentha, spicis confertis, foliis serratis, sessilibus. H. Cliff.* 306. Horse-mint.

N. B. "Vix specie ab antecedente (viz. *M. spicis solitariis, interruptis, foliis lanceolatis, serratis sessilibus. H. Cl. seu M. angustifolia spicata. B. P.* & "*M. tertia. Dod.*) differe videtur." *Lin. H. Cliff.* 306.

4. *Pulegium, Pulegium vulgare, Pulegium latifolium. Off.* *Pulegium latifolium. B. P.* 222. *Pulegium. Dod.* 282. *J. B.* iii. 256. *R. H.* 533. *Syn.* 235. *P. regium. Ger.* 671. *H. Ox.* iii. 371. *Mentha aquatica, seu Pulegium vulgare. T.* 189. *Mentha, floribus verticillatis, foliis ovatis, obtusis, vix crenatis. H. Cliff.* 307. Pennyroyal, or Pudding-grass.

5. *Pulegium cervinum, P. angustifolium. Offic.* *Pulegium angustifolium. B. P.* 222. *Ger.* 672. *R. H.* 534. *H. Ox.* iii. 371. *P. cervinum, angustifolium. J. B.* iii. 257. *P. angustifolium, sive cervinum. Park.* 30. *Mentha, aquatica, satureiæ folio. T.* 190. *Mentha, floribus verticillatis, foliis linearibus. H. Cliff.* 307. Hart pennyroyal, or French pennyroyal.

6. *Mentha piperitis. Ph. Lond.* 13. *Mentha, spicis brevioribus & habetioribus; foliis menthæ fuscæ; sapore fervido piperis. R. Syn.* (ed. 2. p. 124. 3.) 234. *Mentha palustris, spicis brevioribus & habetioribus; foliis oblongis, sapore piperis. R. H.* iii. 284. *M. saxifraga, angustiore folio, spicata, sapore acri, fervido. Pluken. Mant.* 129. *Mentha piperis sapore. Offic. Dale.* 146. Pepper-mint "found by Dr. Fales in Hertfordshire; and communicated to us: since by Mr. Dale in Essex." *R. Syn.* l. c.

7. *Mentha cataria, Nepeta. Off.* *Mentha cataria, vulgaris & major. B. P.* 228. *M. cataria. J. B.* iii. 225. *R. H.* 548. *M. felina, sive cataria. Ger.* 682.

Cataria

Cataria herba. *Dod.* 99. Cataria major, vulgaris. *T.* 202. Nepeta major vulgaris. *Park.* 38. *R. Syn.* 237. N. five mentha cataria, vulgaris & major. *H. Ox.* iii. 414. Nepeta, floribus interrupte spicatis, pedunculatis. *H. Cliff.* 310. Nep, or Cat-mint.

These are all natives of Britain, except the 5th: all species, or varieties of the mentha, except the 7th. They all flower in July, but the 7th, which flowers in August. There are no less than 16 species and varieties of this genus in Britain, which are indigenous according to *R. (Syn.)* In *T. (Inst.)* there are 24. In *H. Cliff.* 8 species, and 4 varieties. All agree much in their virtues. "Mentha aquatica easdem cum sativa vires habet, adeoque in ejus defectu, substitui poterit." *Schrod.* 624. His mentha sativa is either the *M. rotundifolia*, crispa, spicata. *B. P.* Or *M. angustifolia* spicata. *B. P.* *Dale* makes a dozen of them *Officinales*: but the *London Dispensatory* only three, viz. the 1st, 4th, and 6th. And perhaps the most valuable of them all is none of the seven.

"Mentæ nomen suavitas odoris apud Græcos mutavit, cum alioqui mintha vocaretur: unde nostri nomen declinaverunt. Grato menta mentas odore percurrit in rusticis dapibus." *Plin.* l. 19. c. 8. p. 505. l. 28. In Hippocrates we meet with *μινθη* frequently; but I have observed *ῥυσοσμος*, the other name Pliny points at, in the suspected books only; from *ῥῆσος*, suavis, and *ῥσμος*, odor. "Hidyosmi *Theophr.* 7. *Hist.* 7. (p. 810.) at mentæ *μινθην*, habet 6. *Hist.* 7. (p. 678.) meminit." *B. P.* It is not described by Dioscorides, tho' he compares the leaves of several other plants to it, as *sisymbrium*, *hydropiper*, *pentaphyllum*: neither by Theophrastus, tho' he gives some characters of it. Vide *Bed.* in *Theophrast.* p. 813. "Mentastrum sylvestris menta est," says *Pliny* l. 20. c. 14. p. 525. which chapter is de mentastro, menta, pulegio, nepeta & cumino.

"Menta (*ῥῥυσοσμος*) aliis mintha (*μινθη*) cognita herbula est. Vim habens calfacientem, stypticam exsiccantem: &c." *Dioscor.* l. 3. c. 41. p. 189. "Sylvestris *ῥῥυσοσμος* hirsutioribus est foliis, & prorsus major *sisymbrio*, at odore magis viroso: quare minus ad sanorum usus idonea est." *Dioscor.* l. 3. c. 42. p. 190. "Pulegium (*γληχων*) herba vulgaris notitiæ. Extenuat, &c. *Ibid.* c. 36. p. 187. "Sisymbrium (alii *serpyllum* sylvestre vocant) in solo inculto nascitur mentæ hortensis similitudine, sed latioribus foliis, atque odoratius, (*ἰσωςῆσεν*): quod quidem coronis inferitur. Calfaciendi vim habet; &c." *Dioscor.* l. 2. c. 155. p. 141. Canit *Ovidius Metamor.* l. 10. v. 728.

— — — — "An tibi quondam
"Fœmineos artus in olentes vertere menthas,
"Persephone, licuit?"

S E C T. II.

They are all stimulating aromatics, agreeing much with calamint in virtues. The first is called stomachic, cephalic and carminative; and is commended internally in cold, phlegmatic and flatulent indispositions of the stomach and guts, in hiccups, vomitings, heartburns, colics, choleras, vertigoes,

goes, female obstructions, &c. and externally, as discutient and antiseptic, for inflammations, cedematous tumors, gangrenes, &c. The 4th is reckoned more uterine, and successful in menibus & lochiis pellendis; and is also good for coughs, asthma, &c. The 6th is esteemed greatly of late for the colic; and as a specific for the stone in the kidneys and gall-bladder. The rest are little used, and that almost only externally in uterine and nervine baths and fomentations.

“*Menthæ sativæ herba cum floribus, calfacit & siccatur in principio 3. partium est tenuium, subastringit. Usus præcip. in ventriculi imbecillitate, cruditate, singultu, vomitu, flatu, ardore, epatis obstructione, intestinorum dolore, capitis vertigine; lactis coagulationem impedit. Extrinsecus corrigit ventriculi imbecillitatem doloresque colicos sopit (cataplasma:) duritiem mammarum, lactisque coagulationem, capitisque achores sanat, &c. N. mentha aquatica, eadem cum sativa vires habet. Præp. 1. Aqua stillat. ex herba. 2. Syrupus, de mentha, minor. 3. Syr. de M. major. 4. Conserva, ex foliis. 5. Oleum stillat. 6. Oleum infusum, ex mentha crispata. 7. Balsamus. Rarus est. 8. Sal ex cinere.” Schrod. p. 624. It stands among the acria aromatica, & scorbutica leniora, in Boerb. Lib. de M. M.*

“*Pulegium calfacit & siccatur 3. saporis subacris & subamari, partium tenuium, attenuat, incidit, aperit, resolvit. Usus præcip. in menibus ciendis, fluore albo, foetu ejiciendo; confert epaticis, ac pulmonaicis; nausæam ac tormina ventris discutit; calculum ac urinam pellit; ictero ac hydropi medetur. Extrinsecus prodest capiti, somnum arcet, vertiginem discutit, doloribus arthriticis convenit, dentes abstergit, pruritus cutis curat, &c. Præp. 1. Conserva summit. 2. Aqua still. ex herba. 3. Aqua bis destillata. 4. Oleum stillatitium.” Schrod. 657.*

“*Nepeta calfacit & siccatur 3. partium est tenuium, attenuat, aperit. Usus præcip. in morbis uterinis, scil. obstructionibus, sterilitate, foetu pellendo; tum quoque in tartaro pulmonum incidendo, &c. Extrinsecus in balneis pro utero. N. ob gravem odorem raro intrinsecus exhibetur.” Schrod. 634.*

1. The common mint is of a warm, acrid, aromatic and disagreeable taste, scarcely bitter; and strong fragrant smell. “The leaves of water-mint are acrid, bitter, aromatic, and make but little impression on the blue paper. There is in it a sal. vol. oleosum very aromatic. It is very stomachic and diuretic.” *T. Hist.* p. 213. “*Menthæ dantur plures. . . . Odoris fortis, grati, aromatici, saporis amaricantis, acris, calidi, & subausteri. Fere omnes odore conveniunt.*” *Nucl. Belg.* 193.—2. Summitatum thea is of the colour of brandy not too old; and of the aromatic disagreeable taste, and smell of the herb, or distilled water, not bitter. It only dilutes syrup of violets and solution of turnsole: but solutio vitrioli makes it green and subturbid at first, then bluish and more opaque, and precipitates slowly and sparingly. Ol. tartari turns it yellow, turbid, and lets fall a whitish mucus, but not fetid. Hence it is subastringent only &c.—3. It is said to hinder the curdling of milk. “Coire lac dentariæ in caseum non patitur, si illi (*menthæ sativæ*) immergantur folia.” *Diosc.* l. 3. c. 41. p. 189. “*Menthæ folia lacti immersa coagulari, & illud in caseum coire non permittunt. Trag.* Quin & ventriculo lac coagulari non patitur.” *R. H.* *Is this fact?* It abounds with essential

fential oil. And — 4. Is commended and used in many diseases. As the 2d, 3d, 4th, 5th, and 6th, agree in character; so also, much in taste, smell and virtue: Only

Pennyroyal is reckoned more acrid, and efficacious than mint. “It warms and comforts the bowels. . . . the juice, or a strong decoction of the leaves, sweetned with sugar, has been accounted a specific against an hooping cough,” *Miller Bot.* 363. “Succus pulegii cochl. i. mensura, pueris exhibitus, efficacissimum est remedium ad tussim illam clamorosa, seu convulsivam, nostratibus *the chin-cough* dictam, aliis catarrhum ferinum, quæ teneram ætatem plurimum infestare solet. Hujus notitiam D. Boyle acceptam refero &c. *R. H.* 534.

The taste of the pepper-mint is singular; to me it is very hot, penetrating, aromatic and diffusive, smelling like the water-mint, which habitu & loco natali it most resembles; only the leaves are liker to the basil-mint leaves: yet it soon, as it were, cools the tongue: and an acquaintance of mine, of a good taste, informs me it is rather cold than hot in his mouth. “Tota planta sapore est acri & fervido piperis.” *R. Syn.* 235. “Pepper-mint is esteemed by some to be an excellent remedy against the stone and gravel, which seems to be very probable; for besides its hot, biting taste, it has a nitrous one, very discernible.” *Miller Bot.* 293. “The distilled water is by some called colic-water.” *James Disp.* p. 371. “It is a very fashionable water, and may be used properly as a carminative, in case of flatulencies in the stomach, or whenever this organ is intended to be warmed, being very hot and pungent. But I don’t believe it capable of curing any distemper, tho’ it may relieve a symptom.” *Ibid.* p. 634. Doctor *Dillenius*, to the virtues given by *Schroder* to the mentha sativa, as transcribed by Mr. *Ray* in *Syn.* adds, “Quæ vires tum omni menthæ, tum, præ aliis, piperatæ competunt. Singulares namque & præcipuas vires obtinet in ventriculi languore & diarrhæa simplici inde dependente, tum herba ipsius simplex, tum aqua destillata usurpata. Sed oportet eam, ob partium volatilitatem, igne valde leni, & in balneo vaporis vel mariæ destillare; alias enim insipida prope prodit. Id unum mentharum encomio detrahare videtur, quod genituram extinguere auctores non vani tradiderunt.” *R. Syn.* p. 235. Yet the *Lond. Disp.* ordered both for the simple and spirituous pepper-mint water the dried leaves to be taken.

It is true that *Hippocrates* says: “Mentha (μινθῆ) calefacit & urinam ciet, vomitionemque sistit; ac si quis eam sæpe comedat, ejus genitale semen colliquefacit ut effluat, & arrigere prohibet, corpusque imbecillum reddit.” *De victus ratione lib.* 2. *Foes.* p. 359. lin. 40. He says also: “Scolopendrium, mentha, fefeli, caucalides, hypericum, urticæ alvum movent & purgant.” *Ibid.* p. 360. l. 8. Whereas according to *Dioscorides*, “Mentha alstringendi atque exiccandi vi prædita est, & venerem stimulat.” l. 3. c. 41. p. 189.

“Nostrates mentham pisif & fabis incoquere solent ad eorundem flatulentiam corrigendam.” *R. H.* The pulegium cervinum, tho’ preferred to the other by the Physicians of Montpellier, (*Lob. Adv.* 214.) and at least as good as that, is never used here: neither is the mentha cataria.

S E C T. III.

They may be used any way. We have an aqua, oleum, and conserva menthæ; and aqua and oleum pulegii. The oils can be given to very few drops with sugar and well diluted; for there is danger even in the newly distilled waters, before the oil is separated. Mint is used in the aqua absinthii composita, aq. alexiteria: and its oil in the pilulæ stomachicæ, unguentum nervinum, emplastrum stomachicum: and the pulegium is an ingredient in the aqua bryoniæ composita, and trochisci de myrrha; and its oil, in ung. nervinum. There are in the *New London Dispensatory* menthæ aqua simplex, aqua spirituosâ, conserva, and oleum; pulegii aqua simplex, aqua spirituosâ and oleum; and menthæ piperitidis aqua simplex, aqua spirituosâ, and oleum. But they are in none of the compositions, except the oleum menthæ in the empl. stomachicum.

M E R C U R I A L I S.

S E C T. I.

Mercurialis, Mercurialis mas & fœmina. *Off.* Mercurialis testiculata; five mas Dioscorides & Plinii: & Mercurialis spicata, five fœmina Dioscorides & Plinii. *B. P.* 121. *T.* 534. *H. Ox.* ii. 612. *M. mas.* & *M. fœmina.* *Dod.* 658. *Ger.* 332. *M. mas* & *fœmina.* *J. B.* ii. 977. *M. vulgaris,* mas & fœmina. *Park.* 295. *M. annua,* glabra, vulgaris. *R. H.* 163. *Syn.* 139. Mercurialis caule brachiato, foliis glabris. (fœmina & mas) *H. Cliff.* 461. French mercury, the male and female.

It grows on the Sea Beach near Ryde in the Isle of Wight plentifully. *R. Syn.* "It grows frequently in gardens, and in waste places, and among rub-
"bish." *Miller Bot.* 294. The herb is used. The female, but falsely so called, flowers in July and all summer; the other ripening the seed in autumn.

"Linozostis, five parthenion mercurii inventum est, ideo apud Græcos
"hermupœan multi vocant eam, apud nos omnes mercurialem. Duo ejus ge-
"nera masculus & fœmina, quæ efficacior, &c." *Plin.* l. 25. c. 5. p. 632.
"Λινοζωστιν ὅι δὲ παρθενιον, ὅι δὲ Ἑρμυβοτανιον καλεσσι. &c. Linozostin ali-
"qui, parthenion alii mercurii herbulam appellant. Folia habet ocimi, hel-
"xinæ cognata, sed minora: ramulos duplici geniculorum nodo cinctos, &
"alarum cavis multis iisque densis præditos: semen fœminæ quidem racemo-
"sum atque copiosum; mari vero, juxta folia, parvum ac rotundum, ceu
"binos testiculos una cohærentes. Totus autem frutex dodrantalis est, aut
"etiam major. Utraque alvum ciet, &c." *Dioscor.* l. 4. c. 191. p. 320. *Theophr.*
9. *Hist.* 10. Φυλλον censetur." *B. P.* 121.

As in the *Old London Dispensatory* the bonus henricus *J. B.* and *Ger.* are used for the mercurialis, being more common, and as good; so here for the same reason, the following plant is the only mercurialis of our shops.

Mercurialis montana, testiculata: & mercurialis montana, spicata. *B. P.*

122. *T.* 534. *H. Ox.* ii. 613. *M. sylvestris*, five *cynocrambe*. *Dod.* 659. *M. mas* & *M. fœmina*. *Fuch.* 475. *M. sylvestris*, *cynocrambe dicta*, vulgaris. *Park.* 295. *M. perennis*, *sylvestris*, *cynocrambe dicta*. *H. Ox.* ii. 613. *M. perennis*, *repens*, *cynocrambe dicta*. *R. H.* 163. *Syn.* 138. *Cynocrambe*. *Ger.* 333. *Cynocrambe mas* & *fœmina*; five *mercurialis repens*. *J. B.* ii. 979. *Mercurialis*, caule simplicissimo, foliis scabris (*fœmina* & *mas*) *H. Cliff.* 461. *Cynocrambe*. *Offic. Dale.* 69. Dogs-mercury, or wild-mercury.

Cynia, seu *cynocrambe*, aliis *mercurialis sylvestris*, *mas* cauliculum emittit
 “ binum palmorum altitudine, mollem ac subalbidum: folia mercuriali aut
 “ *Hederæ* similia, certis interstitiis candicantia; semen foliis adjacet, parvum
 “ ac rotundum. Folia cum caulibus, olerum instar potæ, vim alvi ciendæ
 “ habent. Jus vero decocti, bilem, aquosaque detrahit.” *Dioscor.* l. 4. c. 192.

p. 321.

It is common in woods, rocky places, &c. The herb and leaves are used.

S E C T. II.

It is diluent, emollient and laxative; said to purge bile and waters; and commended internally in the jaundice, mensibus obstructis, childrens gripes, &c. but is used only externally in clysters, cataplasms, &c. The dogs-mercury has been reckoned of the same nature; but the bad effects it had on some people in Shropshire give cause to suspect it as virulent. It is safe enough however in the decoctum com. pro clystere.

“ *Officin.* Folia. *Vires.* Calfacit & siccat 1. alvum movet (bilem ac aquas purgat). Extrinsecus vulvæ adhibita menses & secundinas trahit, tumores emollit, creberrimi usus in clysteribus. *N.* Sunt e nostratibus muliericulis quæ mercurialem infantibus cum pappâ exhibent, ut alvum solutam retineant, torminaque præcaveant. *Præp.* 1. Aqua stillat. ex herba florescente. 2. Syrupus, de succo. 3. Mel mercuriale. *N.* adhibentur potissimum in clysteribus.” *Schrod.* p. 625. “ Aquosis mollibus emollientibus adnumeratur in *Boerb. Lib. de M. M.*

1. It is of an herbaceous taste and somewhat nauseous, without smell. “ Folia sapore nitroso, calidiusculo & nauseoso.” *J. B.* “ Saporis sunt herbarum.” *Nucl. Belg.* 194. “ It is of an herbaceous taste, a little saltish, (or herby taste, as some translate it;) and does not redden the blue paper. “ By a chymical analysis, it gives much volatile salt, much oil and much earth.” *T. Hist.* p. 213.—2. It is one of the famous five emollient herbs; and though not acrid, yet saponaceous, and so more than a simple diluent. It is very juicy (is it nitrous?) and so may be called deobstruent as well as laxative.—3. It is commended in several diseases. “ The water in which it has been macerated cold for twenty-four hours is given for the dropsy, cachexy, vapours, and green-sickness: the plant is used also in semicupiums, for suppression of the menses, being very emollient; and succi ʒij. depurated and mixed with tincturæ martis ʒij. are given for barrenness. “ Mercury is used in the syrup de longue vie: (which is here described: it is sometimes called syrup de mercurialis compositus, syrup de gentiana, &c. vid. *Lem. Ph.* 132.) It keeps the belly open, purifies the blood, preserves
 “ from

“ from the gout, sciatica and the like maladies.” *T. Hist.* p. 213.—4. *Herbæ Thea* is of a greenish colour at first; tastes of the herb; reddens a little the sol *heliotropii*; but only dilutes syr. *violarum*, and solutio *vitrioli*.—5. We retain the antient *mel mercuriale* for clysters. The *Lond. Disp.* rejects mercury altogether. But

The dogs-mercury is of a more nauseous taste, and somewhat fetid. “ *Radix sapore nonnihil dulci, sed fastidioso; folia gustu nauseoso.* Dodonæo “ *tota herba virosi odoris ingratum redolet.*” *J. B. R. H.* “ *Folia gustu nau-* “ *seoso, odoris virosi ingrati.* In cibo oleris modo sumpta gratior quam “ *communis videtur, & alvum bene solvit.*” *Boecler. Cynos.* 3. 351. “ *Cy-* “ *nocrambe a rusticis inter olera recipitur; sed tum sæpe inde in vomitum* “ *incidunt.*” *Boerb. Hist. Pl. dicta* p. 580. There is in the *Phil. Trans.* No. 203. for September 1693, p. 875. (or *Abridg.* ii. 640.) by *Sir Hans Sloane*, an account of what happened to a man, his wife, and three children, one of which died, on their eating of this herb, fried with bacon, to supper: which seems to evince that it is not only cathartic, but also narcotic. vide *R. Syn.* 139. where it is translated. Yet I am much mistaken if it be not used in diet-drinks by our people in the west sometimes. *Is the French mercury ever taken for the mel mercuriale here?*

N A S T U R T I U M.

S E C T. I.

Nasturtium, *Nasturtium hortense*, *offic.* *Nasturtium hortense*, *vulgatum.* *B. P.* 103. *T.* 213. *N. hortense.* *Dod.* 711. *Ger.* 250. *Park* par 500. *R. H.* 825. *N. vulgare.* *J. B.* ii. 912. *N. vulgare*, seu *hortense*, tenuiter divisum. *H. Ox.* ii. 300. *Lepidium foliis oblongis, variè divisis, vel incis:* *H. Cliff.* 331. Common garden-creffes.

Where it grows naturally I cannot find; but it is commonly sown in gardens; as is also the *N. hortense latifolium.* *B. P.* & *N. hortense crispum ejusdem*; which is either broad or narrow leaved. The leaves and seeds of any of them are used. In the spring it flowers sometimes in three or four weeks after it is sown; and ripens in May or June, or sooner.

“ *Nasturtium nomen accepit a narium tormento. Et inde vigoris significatio proverbio id vocabulum usurpavit, veluti torporem excitantis.* In “ *Arabia miræ amplitudinis dicitur gigni.*” *Plin.* l. 19. c. 8. p. 505. “ *Καρδαμον καρδαμον, quia caput acri calore suo tentat. Unde in pigros, ig-* “ *navos & desides, Græcus est proverbium καρδαμον ἐσθις. Nasturtium comede.*” Vide *Dalecamp. in Plin.* p. 507. Annot. 99. *Dioscorides*, l. 2. c. 185. p. 152. does not describe it. 2. *Nasturtium aquaticum. offic.* *Nasturtium aquaticum supinum.* *B. P.* 104. *H. Ox.* ii. 223. *N. aquaticum.* *Dod.* 592. *N. aquaticum*, five *Cratævæ sum.* *Ger.* 257. *N. aquaticum vulgare.* *Park.* 1239. *R. H.* 816. *Sisymbrium aquaticum.* *Matth.* 379. *T.* 226. *Sisymbrium*, *Cardamine*, five *Nasturtium aquaticum.* *J. B.* ii. 884. *R. Syn.* 300. *Cratævæ sion.* *Eruce folium,* *Iob.* 105. *Sisymbrium, foliis pinnatis, foliolis subcordatis.* *H. Cliff.* 336. Common water-creffes.

It grows in ditches, springs, and watry places, flowering in June. The herb is used. "*Officin. folia, seu herba cum floribus.*" *Schrod.* 633. "Folia." *Pb. Lond.* 14. It seems to be the *sisymbrium alterum dioscoridis*. "Sisymbrium alterum, aliqui cardaminem, alii & hoc etiam sion appellant. Aquatica est herba, in iisdem locis quibus sion proveniens; cardamine vero vocant, quod gustu nasturtium repræsentat. Folia primum rotunda prodeunt, augeſcentia vero, erucæ modo finduntur." *Dioscor.* l. 2. c. 156. p. 142.

S E C T. II.

They agree in virtues with redcole and scurvygrafs, and are used the same way. The first is more common at the tables than in shops: the last affords one of the antiscorbutic juices, and enters the aqua Raphani composita, and unguentum antipforicum.

"Nasturtii hortenſis ſemen & herba ſicca calfaciunt & ſiccant 4, (herba viridis mitior eſt.) Utrumque attenuat, aperit, abſtergit. *Uſus præcip.* eſt in tumido liene, menſibus obſtructis, foetuque mortuo expellendo; tartaream mucilaginem pulmonum incidit, ſcorbuto confert. Vulgo itidem ad expellendos morbillos inſervit ſemen extrinſecus uſu venit in apophlegmatismis, errhinis, phænigmis: furfures & ſcabiem foedam capitis, aliarumque partium ſanat (tritum aut frixum, cumque porci axungia illitum.) *Schroder.* p. 633.

"Nasturtium aquaticum calfacit & ſiccant 2, (exſiccatum 3,) attenuat, aperit. *Uſus præcip.* in calculo ac ſabulo, obſtructione lienis, ac epatis, menſiumque, ſpecificè in ſcorbuto commendatur. N. præſtat recens adhibuiſſe quam exſiccata, ob ſal volatile paulatim evaneſcens. *Præpar.* 1. Succus inſpiſſatus. N. cum aceto naribus illitus, arcet immoderatas vigilias: polypum extirpat ſuccus naribus inditus. 2. Aqua ſtillat. ex integra planta collecta auguſto. 3. Spiritus, ex herba contuſa, addito tantillo fermento, fermentata." *Schrod.* 633.

1. Creſſes are very hot and biting, yet generally the moſt agreeable of all ſuch acrida volatilia, &c. to the taſte, and have a pungent ſmell. Its acrimony is volatile, flying off in drying or decocting; and it inflames and ulcerates the ſkin; and is commended in the ſame diſeaſes with horſe-radish. "Eſt naſturtii ſemini natura ſinapis & erucæ ſemini ſimilis, lepras & impetigines extertit; &c." *Dioscor.* l. c. — 2. Water-creſſes taſte ſomewhat like the common, but are bitter, and not ſo hot, and partake more of the nature of cochlearia, than armeracia; yea are evidently alcaleſcent.—3. Both are commended in the ſcurvy, dropſy, paſſy, gravel, &c. "Water-creſſes are acrid, and do not redden the blue paper. By a chymical analyſis from this plant are got much acid, and much alcali, little urinous ſpirit, little ſulphur, and a good deal of earth." *T. Hiſt.* p. 231. Such analyſes ſometimes want confirmation.

N I C O T I A N A.

S E C T. I.

Nicotiana, Tabacum, Petum, *offic.* Nicotiana, major, latifolia. *B. P.* 169. *T.* 117. *H. Ox.* ii. 492. N. major; five Tabacum majus. *J. B.* iii. 629. Hyoscyamus Peruvianus. *Dod.* 452. *Ger.* 357. Sana sancta Indorum. *Leb. Adv.* 251. Tabacco latifolium. *Park. Par.* 363. *R. H.* 713. Nicotiana, foliis lanceolatis. *H. Cliff.* 56. Broad-leaved tobacco.

It grows in many places of America spontaneously; and is there also, as well as in many parts of Europe, cultivated with great care; being one of the most considerable branches of commerce betwixt the old and new world. In our gardens, if raised on a hot-bed, it will flower in July; and if sheltered from the winter's cold will live several years, flowering and seeding plentifully. There are some varieties of it, but all equally medicinal; though some are more, others less agreeable to the taste and smell of such as habitually use it. The leaves only are used.

Tobacco came first into Europe about the middle of the sixteenth century. "Nicotiana a Jo. Nicotio regis Galliae consiliario dicta, cujus opera, anno 1560 Galliis innotuit, quam Uliisiponæ, dum legati munere fungeretur, a Belga e Florida insula allatam, accepit." *B. P.* Nicot carried it into France in 1559 according to *R. H.* "Allatum tabaco fuit e Florida Americæ, præsertim adjacente insula tabaco, unde nomen habet, circa annum 1558 & 1559. Uliisiponæ in Lusitania a Joan. Nicotio legato Gallo, nicotiana dicta; a Nic. Tornabono, Italo episcopo, in Galliam Legato, Tornabonia, a Cæs. 8. Hist. 43. Accepit vero etiam nomen a regina matre, Catharina Medicea, a cardinale S. Crucis, a magno priori nescio quo imo vero & ab effectu, panacea, herba sancta, sana sancta." *Hoffm.* p. 260. "Brasilianis, a quibus semen primum in Lusitaniam delatum, dicitur petum; Galli, quod D. J. Nicotius, regius aliquando in Lusitania orator, ejus semen primus ad reginam matrem detulerit, illiusque facultates docuerit, nicotianam, & herbam reginæ nominarunt." *Clus. Exot.* 309. "Usum fumi nicotianæ primus in Angliam intulisse dicitur D. Gualterus Raleigh ex America redux, ubi servos & mancipia eo usos observavit, ad somnum conciliandum." *R. H.* "There has been a great deal said about this plant, by several authors, particular treatises having been wrote on it." (*Miller Bot.* 312.) and these not a few. Seguierius, in *Bib. Bot.* p. 446. names near fifty authors on it; as Monardes, Stephanus, Everhartus, Jacobus VI, Thorius, Neander, Paulli, &c.

S E C T. II.

It is a violent emetic and cathartic, and yet a narcotic anodyne; called pectoral and vulnerary; and commended internally for phlegmatic infarctions of the lungs, lethargies, dysentery, &c. and outwardly as anodyne, discutient, and detergent; yea and as emetic, in clysters, cataplasms, epithems, errhines,

errhines, &c. But it is snuffed up, smoked, and chewed much more for amusement, than for its medicinal virtues.

“Herba recens calfacit & siccatur 2, siccatur a 3, (aliis calfacit 1, siccatur 2, aliis refrigerat) abstergit, incidit, resolvit, aliquantulum astringit, resistit putredini. Sternutatoria est, apophlegmatizans, anodyna, vulneraria vomitoria, &c. *Ufus præcipue externi* ad catarrhos cerebri exsiccandos, somnum inducendum, lassitudinem ex labore discutiendam, uteri strangulatum compescendum: a peste præservat (in suffitu) sedat dentium dolores, discutit tumorem uvulæ (in gargar.) medetur lichenibus, phthiriasi, porrigin, achoribus ac favo; mundificat ac consolidat vulnera ac ulcera inveterata, sanat ambusta quoque modo adhibita (balneatione scil. vel sola impositione foliorum recentium nostratis nicotianæ, &c.) Nec tamen prorsus usum quoque subterfugit internum, dum pro vomitorio exhibetur (sat violento) qua ratione curat febres, similesque morbos. Sed cautione hic opus est. N. 1. Non adeo proficiuus tabaci usus est juvenibus ac biliosis. N. 2. Novi qui mictionem nocturnam vespertino tabaci suffitu præcavebat. *Præp.* 1. Aqua, ex foliis. 2. Syrupus de nicotiana. Utrumque cum successu exhibent in asthmate, pulmonumque tartaro, quin & in febribus. 3. Oleum peti stillat. 4. Oleum per infusionem. 5. Sal ex cinere. 6. Unguentum de nicotiana. 7. Balsamum.” *Schrod.* 635.

1. It is of an acrid, oily, bitterish and nauseous taste; and strong pungent smell. I mean the *Virginia* tobacco; for I have raised some here, that had little either taste or smell: but what I had from Mr. Philip Miller, viz. *Nicotiana major angustifolia*. *B. P.* and which for many years has yielded plenty of seed, had, and still the plants raised from it have, a very hot, biting, bitterish taste, and smell like the *Brazil* tobacco. “Folia sapore acido & fervido, sed evanido. Totâ plantâ (viz. latifolia) odorem habet satis gravem.” *J. B. R. H.* “Odor resinolus non ingratus, sapor acris & mordax. In officinis usurpabantur olim folia tantum: nunc tantus est abusus foliorum siccatorum, pro fumo quotidiano, ut mirabile sit dictu.” *Hoffm.* p. 260.—2. It kills lice and other vermin, and F. Redi says the chymical oil conveyed into a wound is as mortal as the poison of a viper. Vide *Red.* Experiment. p. 8. & 315. “*Viganus* (in chym. p. 36.) oleo hoc foetido feles enecari dicit, dummodo una guttula stilletur in linguam. Vide Jo. Jac. Harder. in *Apiario Obs.* 1—7.” Herman. *Cynos.* p. 542.—3. Externally applied, the juice of the green leaves instantly cures the stinging of nettles. Tobacco is said to disperse œdematous and serophulous tumors, cure the itch, phagedenic ulcers, &c. as it certainly thus proves often emetic. *Vid. Med. Ess.* Vol. II. Art. 5. “Exemplum violentæ vomitionis semper immediate sequentis infusionem pulveris tabaci super femur contusum & laceratum, habetur” *Ephem. Germ.* ann. 12. obs. 108.” *R. H.* Dr. *Stevenson* informed me of an instance of the same kind, from a leaf of tobacco applied to a sore arm. I knew a small bit of tobacco put into the nose only, cause sickness, vomiting and purging pretty severely. The same effect it has had in clysters: and it is commonly known that even the smoke of tobacco, at first using it, seldom fails to make the smoker vomit; so little is its nature altered by burning. Hence this smoke conveyed into the anus, has sometimes proved successful in the *Iliac* passion, when other remedies failed, both by distending and stimu-

mulating the guts. But it is as well known that habitual smokers ascribe many virtues to it, and cannot want their pipe. The same is true also of chewing tobacco.

Chewing of tobacco drains off a considerable quantity of that very useful and necessary juice, the saliva; and so is said to make people lean, of which *Borellus* gives an instance; and to be beneficial only to fat and phlegmatic persons, *R. H.* 715. Nevertheless, if we consider that thus the excretories of the glands of the mouth and fauces are kept open; the belly easy; tooth-aches and other rheums often prevented or cured; the breath sweetened, &c. we may easily see that it may be very useful in other cases. Mr. *Ray*, after quoting *Borelli's* observation, adds, "At masticatio tabaci non in omnibus eundem effectum habet, ut experientia didici in amico quodam nostro, qui ob id nihilo macilentior factus est: affirmavit tamen ejus usum dentes antea vacillantes firmasse." (*l. c.*) And I have known the lean and consumptive grow more lusty and corpulent after chewing tobacco for some time; and more decays, phthysical coughs, and asthmas thus cured, than by any other remedy whatsoever: to say nothing of the advantage of the sickness and vomiting it at first occasions. I cannot so much commend smoking, because it dries the throat more, and makes the breath, and every thing about one, stink of a foul tobacco-pipe: yet it has several of the effects of chewing, and many old men are customary smokers; and our country people, that like a pipe, use to say, *Tobacco reek, tobacco reek, it makes me bail when I am sick. Tobacco reek, tobacco reek, when I am bail it makes me sick.* Neither does snuffing want its own use. Tobacco makes a good earhine: nor do I know any prejudice it can do, if it be not from its carrying along with it into the stomach much of the mucus narium, which in great snuffers it can scarce fail to do, when they sleep: and few would like to swallow these lumps of snot, like oysters or leeches, which they frequently hawk up in the day-time. Besides, I have heard of an uneasiness in the stomach which could not be cured, till the patient threw up balls of snuff. This however seldom happens; and always might be easily prevented by taking the leaf instead of the powder. However, seldom do snuffers own it does any prejudice: and although it did more, it would not be easy to dissuade them from using it. So, with *Boeclerus* (in *Cynos. Herm.* 544.) "Naribus tabacophilis & fumibibulis, suam relinquimus consuetudinem incorrigibilem."

"Tu vero expectas a me judicium de fumi usu illo quotidiano? Audivi ab amico, ex Angliâ reduce, sereniss. olim R. Jacobum VI. publice in academia Oxoniensi, disputasse contra hanc fatuitatem, ostensis exemplis illorum, qui laborassent quidem diu insanabilibus pectoris morbis, deliriis, insomniis, convulsionibus, &c. post mortem autem inventi fuerint pulmones habuisse totos nigros & retorridos, non secus ac si fumo indurati essent. Audivi a militibus in Belgio versatis, vidisse se dissecta capita eorum, quibus patera cerebri, ab anatomicis dicta, tota interius esset nigra, licet a carnifice interiissent. Audivi a patricio Norico, qui, in superiori bello Bohemico, vidit omnes, qui in conflictu cum hostibus interierint, Anglos, habere talia capita. Hinc discant sapere illi, qui sapere alias nolunt." *Hoffman.* p. 261.
§. 30.—As to its effects in capite,

“Idem.

“ Idem nobis affirmavit D. Boucheret Pharmacopœius Londinensis. Si hæc vera sint (de quo tamen est cur dubitem) non inde tamen sequitur fumum nocivum esse, cum multos novimus, qui quotidie & copiose per plures annos eo usi sunt, sanos tamen & validos vitam ad extremam senectutem produxisse, nec ullum inde incommodum, sed potius maximum juvenem percepisse: aliis enim ventriculum refocillat & concoctionem promovet, aliis alvum leniter solvit: alii nullum inde commodum, at neque damnum sentiunt, quibus usus ejus adiaphorus est.” *R. H.* 714.—4. It is also commended as a vomit, for inveterate agues, asthma, and manias. But how to regulate the dose is not easily directed; for a few grains may prove as violent to one, as so many drachms will to another of the same age and strength. Tantum valet consuetudo. Dr. *Pitcairn* made Mr. *A. Nisbet*, the famous herald, infuse an halfpenny twist of tobacco in a bottle of small beer, for a night, and take a draught of it in the morning for his asthma: he told me it operated violently, and relieved him considerably for some time. “ Commendo usum tabaci in peste; me enim liberabat peste correptum: omnesque fere domus in quibus hæc planta vendebatur, & Noviomagi, & Londini liberæ erant a contagio, cum vicinæ infectæ essent. *Diemerb. de peste.*” *R. H.* 715. Many extol it (smoking) as a preservative from the plague; but Rivinus says, that in the plague of Leipzig several died who were great smokers of tobacco.” *Miller Bot.* 313. “ Novi tres juvenes robustissimos a dysenteriiis liberatos propinando decoctum tabaci, quod maxima sua violentia, totam mali causam evacuavit, & reliquit anodynam & narcoticam qualitatem. *Diemerb. obs. med.* 19.” *R. R.* 715. But, *de dosi altum silentium.*

Q. 1. Will the habitual use of one narcotic enable one to take with safety a larger dose of another narcotic than otherwise he could? *Fortè.*

2. May not narcotics prove also alexipharmics, or at least prophylactic?

N Y M P H Æ A. *Vide* Roots.

O C I M U M.

Ocimum Brasiliicum *offic.* Ocimum vulgatius. *B. P.* 226. *T.* 204. *R. H.* 541. Ocimum medium, vulgatius. *Lob. Adv.* 215. *H. Ox.* iii. 406. Ocimum medium, vulgatius, & nigrum. *J. B.* iii. 247. Ocimum medium citratum. *Ger.* 673. Ocimum vulgare majus. *Park.* 18. Ocimum, foliis, ovatis, incanis. *H. Cliff.* Common-Basil.

Where it grows wild I know not: raised on a hot-bed it flowers in July or August. The herb is used. “ *Offic.* Folia ac semen.” *Schrod.* 544.

Ocimum ὀκυμαίον, ab ὀκνος, celer, velox, quod celeriter a satiatione, viz. tertio die proveniat: vel, ut alii, ab ὀζειν, redolere. Vide *Bod. in Theoph.* p. 755. Pliny distinguishes between Ocimum and Ocimum. “ Ocimum, quod in vinca feri jubet, antiqui appellabant pabulum, umbræ patiens, quod celerime proveniat.” *Plin.* l. 17. c. 22. p. 432. “ Apud antiquos, erat pabuli genus, quod Cato ocimum vocat, quo sistebant (ciebant, ex. *Varr.* vel citabant) alvum bubus, &c.” *Plin.* l. 18. c. 16. p. 461. “ Omnia (sata) pari tempore nequaquam proveniunt, sed alia celerius, alia serius. . .

“ Celerrime ocimum, blitum, eruca, raphanus. Die namque tertio (ut ita loquar) erumpunt. Lactuca, 4 aut 5. cucumis & cucurbita, 5 aut 6. &c.” *Theoph.* l. 7. c. 1. p. 731. *Plin.* l. 19. c. 7. p. 501. “ Ocimum quoque Chrysippus graviter increpuit, inutile stomacho. . . Præterea insaniam facere & lethargos. . . Addunt quidam, tritum si operiatur lapide, scorpionem gignere; commanducatum & in sole positum vermes afferre.” *Plin.* l. 20. c. 12. p. 523. And some grave authors relate that much smelling at basil has bred scorpions in the brain. Vide *Bodæum in Theoph.* p. 756. & *R. II.* 541.

N. B. “ Ocimum siccum est & calidum, & alvum sistit.” *Hippoc.* de victus ratione. l. 2. p. 359. lin. 34. “ Ocimum humidum & frigidum est, (καὶ ἐνκαρδίον) orique ventriculi gratum.” *Hippoc.* ad scrip. liber de affectionibus. p. 529. lin. 27. In both these places it is ὤμιμον. “ Vomitus solvit, ὠκύρῃς χυλὸς in vino albo.” Notha ad calcem lib. i. de morb. mul. p. 635. lin. 2. “ Ocimum vulgo notum.” *Dioscor.* l. 2. c. 171. p. 146. It is called ocimum βασιλικόν, in *Aetius Serm.* 1. col. 58. Vide *Hoffman.* p. 121.

S E C T. II.

It is aromatic, but not acrid; called pectoral and uterine, also cephalic, cordial, carminative, &c. But it is little used, being now expelled the aqua bryoniæ composita.

“ Calfacit, humectat, digerit, resolvit, expurgat pulmones, menses movet, ideoque usurpari poterit usu interno & externo, sed rarius adhibitum deprehenditur. *Præp.* aqua, ex integra planta collecta Junio.” *Schrod.* 544. Antacida est in *Boerb.* Lib. de M. M.

1. It has a soft, watery, aromatic taste, and fragrant sweet smell, which it retains, in part, even after it is long and well dried. The seed affords an antacid mucilage. “ Folia odore fragranti, sapore nullo excellenti.” *J. B. R. H.* “ Odoris est fragrantis; saporis aromatici, calidi, acris.” *Nucl. Belg.* p. 40.—2. It is commended in the vertigo, lipothymy, asthma, &c. Viribus cum melissâ convenit.

O R I G A N U M.

S E C T. I.

Origanum, Origanum vulgare. *offic.* Origanum sylvestre, Cunila bubula *Plinii.* B. P. 223. *T.* 198. Origanum sylvestre. *Dod.* 285. Origanum vulgare, spontaneum. *J. B.* iii. 236. *R. H.* 539. *Syn.* 236. Origanum Anglicum. *Ger.* 666. Origanum sylvestre, vulgare *Tragi.* *H. Ox.* iii. 359. Majorana sylvestris. *Park.* 12. Origanum, foliis ovatis; spicis, laxis, erectis, confertis, paniculatim digestis. *H. Cliff.* 305. Wild or Field Marjoram.

It grows in thickets, &c. flowering in July. The herb, rather leaves and tops are used. Origanum, q. ὀρεγανός, montis gaudium, quod locis montanis delectetur. Vide *Bod.* in *Theoph.* p. 562. It is the origanum onites according to some, but the origanum sylvestre of Dioscorides according to others. Per-

haps it is neither. "Quod ὀνητίς appellatur, foliis est (Heracleotico) candidioribus, hyssopoque similis: ac semen habet veluti corymbos cohærentes, ac sibi invicem incumbentes. Vis tamen eadem quæ Heracleotico, at minus efficax. Origanum sylvestre (ἀγριορίγανος) aliqui panaces Heraclei vocant, alii κοινὴν; foliis est origani, viz. guttis dodrantalibus, tenuibus, in quibus umbellæ anetho similes insunt; flores candidi; radix tenuis ac inutilis." Privatim venenatorum moribus folia & flores, ex vino in potu auxiliantur." *Dioscor.* l. 3. c. 33 & 34. integra. p. 186. Vide *Plin.* l. 20. c. 16. p. 528. Cunilæ, ait, præter sativam, plura sunt in medicina genera. Quæ bubula appellatur semen pulegii habet, utile ad vulnera, &c."

S E C T. II.

It is a stimulating aromatic, or an attenuating diaphoretic; called cephalic, pectoral, stomachic, and uterine; and is commended internally in lethargies, asthma, vapours, &c. Cum majorana convenit. But it is more used outwardly in baths, &c. The essential oil is reckoned good for the tooth-ach.

"*Offic.* Folia cum floribus seu summitatibus. *Vires.* Calfacit & siccat 3. abstergit, astringit. *Ufus præcip.* In obstructione pulmonum, epatis ac uteri, & hinc in tussi, asthma, ictero: auget lac; ichorosa excrementa per sudorem expellit (ante balneum assumptum). Extrinsecus usu venit crebriori: eoque in balneis uterinis, cephalicis, totius corporis (contra scabiem). *Præp.* 1. Aqua stillat. ex integra planta cum floribus. 2. Oleum stillat. (raro proflat). 3. Sal ex cinere (raro itidem paratus). *Schrod.* 639." Antacidum, attenuans, acre aromaticum, est in *Boerb.* Lib. de M. M. N. B. Ung. nervinum.

It is of an acrid aromatic taste, and fragrant smell, somewhat like that of majorana, but not so sweet. "Foliorum sapor acer, aromaticus, odor suavis." *J. B. R. H.* "Saporis est valde calidi & acris, odoris valde grati aromatici. Est aperitivum, diaphoreticum, cephalicum, stomachicum, carminativum, bechicum, diureticum, antihystericum, emmenagogum, anodynum, resolvens, &c." *Nucl. Belg.* 217. "It is acrid, aromatic, detergent, and reddens very little the blue paper. . . It should be used by way of tea in the asthma, violent cough, indigestion, pleurisy. It is put into pediluviums, and semicupiums, for vapours, green-sickness, and palsy." *T. Hist.* p. 217.

L E C T U R E L I X .

PÆONIA. *Vide* Roots.

PAPAYER. *Vide* Opium.

P A R I E T A R I A .

S E C T. I.

Parietaria helxine. *Offic.* Parietaria, officinarum, & Dioscoridis. *B. P.* 121. *T.* 509. *H. Ox.* ii. 600. Parietaria. *Did.* 102. *J. B.* ii. 976. *Ger.* 331. *R. H.* 206. *Syn.* 158. Parietaria vulgaris. *Park.* 436. Parietaria, foliis lanceolato ovatis. *H. Cliff.* 469. Pellitory of the wall.

It grows on walls, and in rubbishy places; flowering in June and July. "Helxine a semine aspero, vestibis tenaciter adhærente: περδινιον Galeno 6. "simpl. quod perdices hac delectentur. *Plin.* l. 22. c. 17. Helxine & perdicium. Parietaria, quod in parietinis exeat, unde muralis herba." *Cels.* l. 2. c. 33. *B. P.* "Vitriaria & urceolaris dicitur, quod ob nitrositatem suam, "tergendis urceolis & vitreis vasis efficax sit." *R. H.* 205.

"Helxine, quam nonnulli parthenium, alii perdicium, alii sideritin, seu "Heracleam; alii vitriariam seu urceolariam, alii ixinen sylvestrem, alii clibadion, alii denique polyonymon, appellant, nascitur in maceris & parietinis. "Cauliculos profert tenues ac leviter rubentes; folia mercurialis, hirsuta; & "circa caules velut exigua semina, aspera, vestibis adhærescentia." *Dioscorid.* l. 4. c. 86. p. 278.

S E C T. II.

It is diluent, emollient, and diuretic; called pectoral, nephritic, and vulnerary; and is commended internally in the strangury, gravel, stone: but is more used in clysters and cataplasms.—It is one of the ingredients *decocti ad nephriticos*.

"Refrigerat & humectat parum, emollit, maturat, extergit, subastringit. "Ufus ejus internus licet rarus sit, tamen prodest in pectoris mucilagine, & "hinc in tussi, in renibus extergendis, & hinc in stranguria & calculo. "Extrinfecus crebrior ejus est usus, isque in tumoribus, erysipelate, ambustis, "vulneribus; & ut plurimum adhibetur in clysteribus & cataplasmatibus. "Præp. Aqua stillatitia, ex integra herba mense Julio collecta." *Schrod.* 642. Aquosum molle emolliens, & nephriticum vegetabile est, in *Boerb.* Lib. de M. M.

It is, 1. of an herbaceous watery taste, and no smell. "Est gustu nitroso, "blites, & superficie abstergente." *J. B.* ii. 977. "Multius tota ad enemata, & balnea abstersioni accommodata, gustu item ut superficie abstergente "nitroso, bliteo, cui admodum similis." *Lab. Adv.* 98.—2. Summitatum thea is very transparent, of a canary colour, herbaceous taste, almost like that of plain barley water, and earthy smell. It reddened a little a solution of

turnsole. Solutio vitrioli turned it a little muddy, and precipitated a small quantity of an ash-coloured mucous sediment: oleum tartari gave it a more citron colour, diminished its pellucidity, and made it somewhat fetid when rubbed between the fingers. Hence it is not astringent, but somewhat ammoniacal.—3. “Salem nitro sulphureum præbet hæc planta, non secus quam borrago & buglossum. *D. Boyle* (de Utilitate Phil. Nat.) Quod sale nitroso abundet, vis ejus deterforia ostendit.” *R. H.* “By a chymical analysis it yields a good deal of oil, much fixed salt, and much earth, both acrid and acid liquors, no volatile salt, but some urinous spirit.” *T. Hist.* p. 292.—4. It is much commended in obstructions of urine, both inwardly and outwardly applied. “Succi ℥ij. haustæ, urinam mire provocant suppressam.” *Matth.* 782. who says it cures green wounds in three days, so as to need no other application. “Applicata pubi, ischuriæ infantum medetur.” *Herman. Cynos.* p. 546. “Saporis & naturæ est nitrosi. Est aperitiva, insigniter diuretica, lithontriptica, & alvum laxans.” *Nucl. Belg.* 221.

N. B. “Flosculi conferti circa caulem ex foliorum alis, floccos coccinei serici imitantur primulum e nodulo emicantes: post se stamina ostendunt obscure, ex albo purpurascentibus apiculis, involuta, quæ si stilo evolvere coneris, subsultim, excusso pulvere cum impetu, spectaculo jucundo, se expandunt repanda, in medio feminis rudimentum circumdantia.” *J. B.* ii. 976.

P E R S I C A R I A.

S E C T. I.

Perficaria, Perficaria acris, Hydropiper. *offic.* Perficaria, urens; seu Hydropiper. *B. P.* 101. *T.* 509. Perficaria acris, sive Hydropiper. *J. B.* iii. 780. *H. Ox.* ii. 589. Perficaria vulgaris, acris, sive minor. *Park.* 856. Perficaria vulgaris, acris; sive Hydropiper. *J. B. R. H.* 182. Perficaria vulgaris, acris; seu hydropiper. *J. B. R. Syn.* 144. Hydropiperi. *Dod.* 607. Hydropiper. *Ger.* 445. Perficaria, florum staminibus fenis, stylo bifido. *H. Cliff.* 42. Hot Arsmart, Water-pepper, or Lake-weed.

It grows by rivulets, ditches, and other watery places, flowering in July. The herb is used. “Hydropiperi apud aquas maxime stagnantes, leniterve fluentes gignitur. Caulem edit geniculatum ac solidum, circa quem alarum sunt concavitates, ac folia minthæ similia, sed majora, delicatiora, candidioraque, gustu acri a piperis modo, non tamen aromatica. Fructum gerit in furculis parvis, prope folia erumpentem, & racematim cohærentem, qui et ipse acris est. Radicem habet parvam inutilem.” *Diosc.* l. 2. c. 191. p. 155. If this be our plant, it is not very accurately described. *Etyman patet.*

S E C T. II.

It agrees much with burnet-flaxifrage in virtues, being an acrid detergent diuretic; is called lithontriptic; and commended internally in the stone, drop-
sy,

fy, scurvy, &c. and outwardly for tumors and ulcers. It is an ingredient in the aqua petroselinii composita; but is little used.

“*Offic.* Folia calfaciunt & siccant. *Ufus præcip.* extrinsecus in vulneribus, tumoribus induratis, ulceribus inveteratis, (in cataplasma.) N. Paracelsus in hydropiperis descriptione admodum prolixus est. Sunt qui hac herba ad transplantationem morborum, præsertim incantatione introductorum, utuntur.” *Schrod.* 645.

1. It is of a hot biting taste, and no smell. “Sapor plantæ acris & mordax.” *R. H.* “Sapor acris & urens.” *Nucl. Belg.* 224. “Borage is of a very acrid and burning taste, and reddens (vivement) the blue paper. It is full of acid, sulphur, and earth. For by a chymical analysis, it gives much acid, sulphur, and earth; and a little volatile salt. Arsmart is very deterfive and vulnerary; and used in clysters for the dysentery and tenesmus.” *T. Hist.* p. 219. Acre aromaticum, & alcalescens est in *Boerb.* Lib. de M. M. Dried its acrimony escapes off.—2. “Aqua hujus stillatitia efficax est ad minuendum calculum etiam vesicæ experimento cujusdam nobilis nostratis, qui quotannis, in usum pauperum, magnam ejus quantitatem distillare solebat.” *D. Boyle de Utilitate Phil. Nat.* part ii. p. 65. *R. H.* But neither plant nor water have place in the London Pharmacopœia. Vide *Helmont de Magnetica Vuln. cur.* § 29. p. 708.

P I L O S E L L A.

S E C T. I.

Pilosella, Auricula muris. *offic.* Pilosella major, repens, hirsuta. *B. P.* 262. Pilosella major. *Dod.* 67. Pilosella majori flore, sive vulgaris, repens. *J. B.* ii. 1039. Pilosella repens. *Ger.* 638. *R. H.* 243. *Syn.* 170. Pilosella minor, vulgaris, repens. *Park.* 689. Pilosella monoclonos, repens, vulgaris, minor. *H. Ox.* iii. 77. Hieracium, foliis integerrimis, ovatis; caule repente, scapo unifloro. *H. Cliff.* 388. Dens leonis, qui Pilosella officinarum. *T.* 469. Common creeping Mouse-ear.

It is common enough in commons and dry pastures, flowering in June and July. The herb is used. “Pilosella, a copiosis pilis quibus vertitur nomen sortita est, quam aliqui ad myosotidem, alii ad holostium referunt. Sunt qui intybi minimam speciem faciant.” *B. P.*

S E C T. II.

It is an attenuating diuretic, and deobstruent; called astringent and vulnerary: and is commended internally in fluxes, hæmorrhages, hernias, heat of urine, consumption, jaundice, &c. and externally, for sore mouths, ulcers, herpes miliaris or shingles, &c. Cum dente leonis convenit.

“*Offic.* Integra planta, seu folia, calfacit & siccant. 2. Adstringit, abstergit, constringit, sternutatoria est, & vulneraria (intrus & extus adhibita), dylen-
teriam, alvi uterique fluxus sistit, bilem æstuantem sedat & incrassat, her-
nias (præcipue infantum) curat. Extrinsecus medetur ulceribus oris (in
“collu-

“collutionibus) hæmorrhagiam narium sedat (pulvis nari inditus). *Præp.*
“aqua ex integra planta distillata.” *Schrod.* 542.

It is of a bitter taste, somewhat rough, like dens leonis (of which it is a species), or of hieracium; and has no peculiar smell. “Surculi amarum lac fundunt. Folia sunt sapore exsiccante.” *J. B. R. H.* “Saporis est austeri & subamari.” *Nucl. Belg.* 227. “This plant is very bitter, and reddens a little the blue paper. By a chymical analysis, besides several acid liquors, it yields much oil and earth, a little urinous spirit, no volatile salt, which shews that it contains a salt like alum, enveloped in much sulphur, and mixed with a little sal ammoniac: thus it is vulnerary and deterfive. *Tragus* says the infusion is good for the jaundice, and to prevent the dropsy. *Tabernemontanus*, that the plant is a specific for ruptures: the extract is used for inward ulcers, and the phthisis. *Pena* and *Lobel* think the plant admirable for the stone.” *T. Hist.* p. 516. How he finds here an aluminous salt, I see not: but its being a deterfive vulnerary is better founded. “*Pilosella*, auricula muris . . . universa astrictoriæ facultatis, quadam tenuitate calida mixtæ, cujus ea est vis, ut succo decoctove acies chalybeæ candentes sæpius mersæ, quamlibet duritiem lapideam, ferreamve præcidant, & demoliantur, nec tamen retundantur, aut hebetescant. Vi etiam est præsentissima ad calculum.” *Lob. Adv.* p. 200.

P I M P I N E L L A.

S E C T. I.

Pimpinella, Sanguisorba, *Pimpinella sanguisorba. offic.* *Pimpinella*, sanguisorba, minor, hirsuta. *B. P.* 160. *T.* 157. *H. Ox.* iii. 263. *Pimpinella sanguisorba. Dod.* 105. *Pimpinella hortensis. Ger.* 1045. *Pimpinella vulgaris*, five minor. *Park.* 582. *R. H.* 401. *Sanguisorba minor. J. B.* iii. 2. 115. *R. Syn.* 203. *Poterium inerme. H. Cliff.* 446. Common Burnet.

It grows in hilly pastures, especially if chalky, plentifully in England, flowering in June. The herb or leaves and flowering tops are used. “Sanguisorba vel sorbastrella, quod sanguineos fluxus sistat: quæ *πιμπινελλε* myrepso, & quibusdam sideritis secunda *Dioscor.* censetur. An syssitieteris “*Plinii.*” *B. P.* 159. Vide *Dioscor.* l. 4. c. 34. p. 256. et *Plin.* l. 24. c. 17. p. 624. There is some probability of its being the sideritis altera *Dioscoridis*; but none for its being the syssitieteris *Plinii*, (to which he gives many names, but no description) if it be not quoniam vino mire conveniat, and is thence called *Dionysionymphas*.

S E C T. II.

It is a subastringent vulnerary; called cordial, and alexipharmic; and in fluxes, hæmorrhages, catarrhs, consumptions, to prevent abortion, &c. it is commended: it is also said to have cured the hydrophobia.

“*Offic.* Herba cum floribus, radix. Refrigerat moderate, siccatur, astringit; “vulneraria ac pulmonica est, saporis grati. *Ufus præcip.* in catarrhosis affectibus

“ tibus pulmonum, phthiſi ex eroſione, in morbis malignis, in profluviis alvi, hæmorrhoidum; præcavet abortum extrinſecus in hæmorrhagia quacun- que “ utiliter adhibetur. *Præp.* 1. Aqua ſtillat. ex integra planta cum radice & “ floribus collecta Junio. 2. Syrupus de ſucco. 3. Conſerva, ex floribus.” *Sebred.* 672. Inter acida auſtera eſt in *B. Lib. de M. M.*

1. It is of a mild ſubſtringent and not diſagreeable taſte, and ſoft me- lony-smell. Or rather it ſmells and taſtes of cucumbers, with a little of the rankneſs of the burnet-faxifrage; at leaſt in October. “ Radix eſt cum ama- “ rore aliquo adſtringens; folia melonis odore, ſaporeque, cum adſtrictione.” *J. B. R. H.* “ Odo- ris eſt ſatis grati, ſaporis herbaceo-ſalti, ſubauſteri & ſatis “ grati.” *Nucl. Belg.* 228. “ It is of an herbaceous ſaltiſh taſte, and reddens “ very little the blue paper. Analyſed it gives ſeveral acid liquors, much “ volatile ſalt, much oil, and much earth. So it is not ſurpriſing that it “ ſhould be deterſive, vulnerary, diaphoretic, diuretic, and proper to purify “ the blood and reſtore the tone of the parts.” *T. H.* p. 517.—2. Infuſed green in wine or ale, it gives it ſoon an agreeable flavour; but not when dried or bruſed. “ Habet, vero ſuperficie tenus, quandam leviter odoratam & “ temperatam qualitatem, quam in vinum injecta deponit: hæc nec aridæ “ herbæ adeſt, nec ſucco aut decocto communicatur. In acetariis ad hilari- “ tatem facere creditur, veluti & in vinum injecta, cui gratiam quandam “ inter bibendum conciliat.” *Dod.* 105. It is to this quality its cordial vir- tues are attributed.” “ Virens vino injicitur ad cor exhilarandum, eique “ gratiam conciliat, communicato odore & ſapore aromatico, melonis æmulo. “ Præſervat etiam a peſte & morbis contagioſis.” *R. H.*

“ Henrici II. Galliarum regis, venator bona fide aſſeveravit pimpinellam “ ad præcavendam hydrophobiam tantam vim obtinere, ut quicunque eam “ aliquot diluculis, vel in acetariis, vel alio quovis modo apparatus com- “ derit, nihil inde incommodi ſentire poſſit.” *E. Palmario* de morſu canis rabidi. *J. B.* iii. 2. 120. who employs near five pages on this plant, more than one page being on its virtues. “ Panchovius reſert regem Chabam, “ finito quodam prælio 15000 vulneratos uſu pimpinellæ reſtituiſſe.” *R. H.* 402. *Vide ſupra* pimpinella faxifraga, which is often confounded with this plant. And hence it is that it is commended in the ſtone and gravel, by Miller, James, &c. “ An herba aſtringens utilis eſſe poſſit in arena & cal- “ culo, ut nonnulli volunt, lectori conſiderandum proponimus.” *R. H.* “ Sanguiforbæ radix reſpondet. Caryophyllatæ hujus radicis uſu, hydro- “ phobia fuit curata.” *Herman. Cynof.* p. 171.—3. Herbæ thea is but little tinctured, and taſtes and ſmells like weak barley-water. It reddens, but weak- ly, a ſolution of turnſole; oleum tartari makes it yellow, but not fetid; and with a ſolution of vitriol it becomes opaque, of a bluſh-green-black.

P L A N T A G O.

S E C T. I.

Plantago, *Plantago latifolia. offic.* *Plantago, latifolia, ſinuata. B. P.* 189. *T.* 16. *Plantago major. Dod.* 107. *Plantago major folio glabro, non laci-*

niato ut plurimum. *J. B.* iii. 502. *Plantago latifolia. Ger.* 419. *Plantago latifolia, vulgaris. Park.* 493. *H. Ox.* iii. 258. *R. H.* 876. *Syn.* 314. *Plantago scapo spicato, foliis ovatis. Fl. Lap.* 34. *Plantago, foliis ovatis. H. Cliff.* 36. Great Plantain or Way-bread.

It grows every where by the way side, &c. flowering in June. The leaves, seed, and root are used, or the whole plant. “*Plantago, ἀργελασσον, Dioscoridi, i. e. lingua agnina dicitur: aliis πολυνευρες, multinervia, & ἑπτα-πλευρες, septinervia, Latinis plantago, a planta ducto nomine.*” *B. P.* 189. “*Plantago a latitudine foliorum, plantam pedis æmulantium, dicta existimatur.*” *R. H.*

“*Plantago duum est generum, minor una, major altera. Minor quidem foliis prædita est angustioribus, minoribus, mollioribus, lævioribus & tenuioribus; cauliculis vero angulosis ad terram inclinatis; floribus autem pallidis, ac semine summis caulibus emicante. At major & amplior latiorque est, & latifolia, oleracea (vel in oleris usum apta). Caulis huic angulosus, subruber, cubiti altitudine, a medio ad verticem tenui semine circumdatus. Radices subjacent teneræ, hirsutæ, candidæ, digitali crassitudine. Nascitur in paludibus, sepibus & locis religiosis. Major porro efficacior est.*” *Dioscorid.* l. 2. c. 153. p. 140. It is *σελεφερος* & *ἀργελασσον*, in *Theoph.* l. 7. c. 10. p. 842. Vide *Bodæum.* p. 848. & *Plin.* l. 25. c. 8. p. 637. I find it not in *Hippocrates.* Neither boves nor equi eat it, according to *Lin. Pan Swecus. Amæn. Acad.* ii. p. 240.

S E C T. II.

It is an attenuating, diuretic, and subastringent vulnerary; called hepatic: and is commended internally for fluxes, hæmorrhages, internal ulcers, consumptions, &c. and outwardly for wounds and ulcers of all kinds. Yet it is little used here, except in the syrupus e symphyto, and emplastrum defensivum.

Offic. “*Semen, folia, radix. Refrigerant & siccant 2. abstergunt, incraasant, epatica sunt ac vulneraria. Usus præcipui in fluxionibus cujuscunque generis. e. g. alvi, expuitione sanguinolenta, gonorrhæa, mictione involuntaria, in mensium profluvio, in febribus, & extrinsecus in mundificandis, consolidandisque vulneribus, ac ulceribus inveteratis. Præp. 1. Succus inspissatus, ex foliis. 2. Aqua stillat. ex herba integra. 3. Syrupus de succo.*” *Schrod.* 650. “*Succus plantaginis vel merus, vel cum succo limonum mixtus, insigne est diureticum.*” *D. Needham. R. H.*

1. It is of an herbaceous somewhat bitter taste, and no smell. “*Folia sunt sapore, ut mihi videtur, aspero, cum aliqua acrimonia & amaritudine.*” *J. B.* “*Saporis primo herbacei, deinde subausteri.*” *Nucl. Belg.* 230. “*Plantain leaves are bitter, astringent, and redden a little the blue paper: the roots redden it more, and are astringent only.—This plant is vulnerary, resolute and febrifuge. Tragus values it highly in consumptions. In the country they give succi ʒij. to ʒiv. in the beginning of the fits, in agues. Extracti ʒij. or seminis ʒi. stop fluxes and all kind of hæmorrhages. The ptisan and distilled water have the same virtues: they are ordered in the dys-*”
“*sentery,*

“fentery, hæmoptoe, fluxu hæmorrhoidum aut mensium nimio, fluore albo, hæmorrhages: in fine, plantain is used in every vulnerary and deterfive potion.” *T. Hist.* p. 222. who adds that “collyriums and gargarisms are made of it; and it is an ingredient in Julian Paulmer’s pulv. ad rabiem.” —2. Foliorum thea is very transparent, little tinctured, of a new brandy colour, an herbaceous pretty bitter taste, and grassy smell. It only dilutes syr. viol. and reddens but little sol. heliotropii. With ol. tartari it becomes yellow, but not of a urinous smell. Solutio vitrioli turns it first green, then dark and opaque, precipitating little and slowly. Hence it is subastringent only at most; and deterfive.—3. Few plants seem to have been more used by the ancients than plantain. Dioscorides commends it in inflammations, pustules, burnings, bleedings, bites of dogs, carbuncles, scrophulæ, and other tumors; for all foul, malignant, and spreading though leprous ulcers, fistulæ; for ophthalmiæ, otalgies, tooth-achs, hysteric fits, dysenteries, &c. outwardly applied: and internally for fluxes, hæmorrhages, dysentery, leucophlegmatia, epilepsy, asthma, hæmoptoe, phthisis, ulcers in the reins and bladder, &c. and concludes thus: “Cæterum ferunt ternas radices, cum vini cyathis iij. & aquæ pari modo, tertianis febris; itemque quaternas quartanis auxiliari. Sunt & qui radice vinculo e collo suspensa, utantur ad strumas discutiendas.” *Dioscor.* l. c.

This calls to mind *G. W. Wedelius* his amuletum antipestilentielle, which he wore fifty years, and thought a preservative against all infection. It was composed of the rad. colchici, & plantaginis, & Fl. lavendulæ. You have an account of it in his *Experimentum curiosum de colcho veneno, & alexipharmaco simplici & composito.* Jenæ 1718. in 4to. See *Geoff.* iii. 350. who himself seems to be a believer in the virtue of this amulet, although he quotes an instance where it did not succeed from *Jac. Wolfius* and *Rivinus*’s judicious opinion concerning it. “D. Aug. Quir. Rivinus (says he) tractatu de peste Lipsiensis, an. 1680. de hoc amuleto sibi ipsi communicato mentionem facit tanquam certissimo contra pestem: (here appears to be designed ambiguity) & postea suam de his amuletis mentem aperit: & non esse alium eorum usum, nisi quod his consili præsidiiis, plebei præsertim magnanimi reddantur, minulque contagium perhorrescant, existimat. Omnes autem norunt quid valeat terror, quantum pestilentia vires adaugeat.” Thus *Geoffroy*. This is the best apology also for such fraudulent impositions.

Galen gives it most of *Dioscorides*’s virtues, and commends it also in obstructions of the liver and kidnies. Vide *Simpl.* l. 6. p. 58. G. Nor have the moderns been sparing of their praises of plantain. Thus an electuary made of fresh comfrey roots, juice of plantain, and sugar, “adversus vomitum & expuitionem sanguinis, nullum certius & præsentius remedium.” *Boyle de Util. Phil. Nat.* part 2. p. 150. *R. H.* 879. From which our syrupus e symphyto differs not much. “Mulierculæ Gallicæ, toto gestationis tempore, ad abortum præcavendum, singulis fere diebus, sumunt sem. plantaginis 3ß in jusculo, aut ovo, & non sine fructu.” *River. Prax.* p. 479. *R. H.* l. c. *B. Hist. Plant.* dicta p. 566. “Hæc planta habet virtutem adstringentem sine ulla tarditate manifesta & acerbitate.” *Stupide!*—

P O L I U M.

S E C T. I.

Polium. Polium montanum. *offic.* Polium montanum luteum. *B. P.* 220. *T.* 206. *Tab. Ic.* 364. *Ger.* 653. *R. H.* 525. *H. Ox.* iii. 355. Polium. *Dod.* 283. Polium montanum tertium. *Clus. H.* 361. Polium montanum vulgare. *Park.* 24. Teucrium, foliis oblongis, obtusis, crenatis, sessilibus, spicis subrotundis, pedunculatis. *H. Cliff.* 302. Yellow Poley-mountain.

It grows in Spain, South-France, &c. flowering in the spring. "Florebat vero natali loco martio mense, apud Belgas serius." *Clus. H.* 362. "Junio & Julio floret." *Dale.* p. 144. The herb, or leaves and tops are used.

There are two polia in Dioscorides, viz. (α) polium montanum, for which some take polium montanum album. *B. P.* others polium montanum luteum. *B. P.* otherwise polium maritimum erectum Monspeliacum. *B. P.* &c. (β) polium alterum fruticosius: which some think the polium lavendulæ folio *B. P.* or his first polium montanum. "Volunt officinæ non quodvis polium sed montanum i Dioscoridis, cujus apud Bauhinum quatuor varietates, earundem, ut puto, virium." *Hoffman.* p. 426. And any of them may be taken for it; it being used only here in the mithridatium Damocratis, and theriaca Andromachi. Schroder has no polium, but the abrotonum fœmina, foliis teretibus. *B. P.* which is the polium Theophrasti, & Dioscoridis, & Arabum, vermiculato folio. *Col.* i. 54. The old London dispensatory has also two polia, viz. polium montanum, i. e. polium maritimum erectum monspeliacum. *B. P.* and polium creticum, i. e. polium angustifolium creticum, *B. P.* "Polium creticum *offic.* cum polio albo (that is polium montanum album. *B. P.*) viribus convenit, quocum in officinis pharmacopolarum confunditur, & pro eo venditur." *Dale* 145. "Polium creticum, *offic.* It agrees in virtues with the polium montanum, for which it is often sold in the shops." *James Disp.* p. 408. *Cujus contrarium est verum.*

"The candy-poley is much of the nature of the polium montanum, but is rather stronger; and, if it could be procured, is what ought to be used when polium creticum is prescribed. But as it is hardly to be met with, the other may be used without much detriment to any composition." *Miller Bot.* 353. *Dale*, edit. 2. p. 235. The polij summitates, are the tops of the polium angustifolium creticum. *B. P.* or the polium maritim. erect. Monspeliacum; according to the new London dispensatory, which might well have saved or enlarged the alternative. *N. B.* In the mithridatium of *this accurate* dispensatory polium simply is ordered; but in the theriaca folia polii. *Pharm. Edinb.* (editionis etiam 1744) for the mithridatium orders polium montanum; for the theriaca polium creticum, which is not among the simples. "Sic dictum propter canitiem, quæ in capitulis, secundum Dioscoridem, at secundum Plinium in foliis apparet." *B. P.* Vide *Dioscor.* l. 3. c. 124. p. 225. The polium montanum luteum *B. P.* is the only polium *Cod. Med.* Vide *S. Pauli Quad. Bot.* p. 117.

S E C T.

S E C T. II.

It is an attenuating diaphoretic; called alexipharmac, cephalic, and uterine; and is commended in the palsy, epilepsy, madness, female obstructions, jaundice, dropsy, &c. and may be given to ʒj.

“ Polium alexipharmacis olim dicatum, apud Galenum (8. simpl.) est majus & minus, quorum illud est infra hoc. — Utrumque est amarum & acre, calidum in 2. completo, siccum in tertio.” *Hoffm.* 426. “ Cum acre sit & amarum, urinam & menses ciet, hydropicos & ictericos juvat, venenatis morfibus auxiliatur.” *R. H.* “ Sudores, menses & urinam movet; est cephalicum, aperitivum, vulnerarium, stomachicum, & anthelminticum.” *Nucl. Belg.* 232. “ Polium celebre est in uteri vitiis ab obstructionibus. Sylvius (*Prax. Med.* l. 2. c. 20. § 148.) inter celebratissima medicamenta antepileptica, post rutam, polio montano secundum locum tribuit: veteres vero vim contra maniam & noctambulationem.” *Herman. Cynof.* p. 477.

It is of an aromatic bitter taste, and pretty fragrant smell. “ Saporis amari aromatici, odoris grati.” *Nucl. Belg.* 232.

P O L Y G O N U M.

S E C T. I.

Polygonum, Polygonum mas, Centinodium. *offic.* Polygonum latifolium. *B. P.* 281. *T.* 510. *H. Ox.* ii. 591. Polygonum mas. *Dod.* 113. Polygonum mas vulgare. *Ger.* 565. *R. H.* 184. *Syn.* 146. Polygonum mas, vulgare, majus. *Park.* 443. Polygonum five Centmodia. *J. B.* iii. 374. Polygonum. *Cæs.* 168. *H. Cliff.* 150. Common Knotgrafs.

It grows every where by the way sides, &c. flowering in July, and all summer. The herb is used.

“ Polygonon Dioscoride a copiosis geniculis, quibus caules ci guntur, dictum. Plinio (l. 27. c. 12.) Polyganon Græci vocant, quam nos sanguinariam.” *B. P.* 280. It is pretty well described by *Dioscorides* (l. 4. c. 4. p. 247.) by the name *πολυγονον ἀρρεν*.

S E C T. II.

It is an antiseptic and subastringent vulnerary; and is commended internally in fluxes and hæmorrhages, particularly in vomiting of blood; and outwardly for inflammations, wounds and ulcers. It is used in the emplastrum defensivum.

“ Refrigerat 2. (aliis in princ. 3.) siccatur, astringit, vulneraria est. *Ufus præcip.* “ in sistendis fluxibus quibuscunque, diarrhœa, dysenteria, fluxu uterino, vomitu, hæmorrhagia narium. Extrinsecus prodest vulneribus, ulceribus, inflammationibus oculorum, mammæ tumoribus, febri tertianæ (carpis

"impof.) *Præpar. aqua stillat. ex herba collecta in principio Augufti.*" *Schred. 652.*

1. It is of an herbaceous, subviscid and somewhat rough taste, without smell. "Radix sapore adstringente." *R. H.* "Folia gustu viscido." *J. B.* "Saporis est herbacei & subausteri." *Nucl. Belg. 233.* "This plant has an herbaceous glutinous (gluant) taste, and is a little acid; it reddens much the blue paper. By a chymical analysis it gives much acid, earth and oil, little volatile salt, and little fixed very-lixivial salt. It is very vulnerary and astringent. The juice, ptisan, or infusion in wine, is given for all sorts of hæmorrhages." *T. Hist. p. 351.* But—2. Because Dioscorides says, "Vis epoti succi adstringere & refrigerare: prodest hæmoptoicis, alvi fluxionibus, cholera & stranguria laborantibus: nam evidenter urinas ciet. (l. c.) His virtues of it are declared inconsistent, as if no astringent could prove diuretic: Vide *S. Pauli Quad. Bot. p. 439.* Is it astringent? *Herbæ thea* is of a greenish whey-colour, of little taste, not astringent. With sol. vitrioli it became greenish-brown and opaque: with ol. tartari it smelled urinous. In five days its scent was somewhat sourish; but in about two weeks afterwards it stank abominably.—3. It is said to be hurtful to sheep. "Carolus Stephanus valde nocuam herbam ovibus, si ea vescantur, asserit. Ait enim totum earum ventrem inflari, easque humorem subtilem & valde fœtidum excernere." *J. B. iii. 376.*

"Camerarius in nobilissimo quodam viro hujus succum paucò vino styptico propinatum, contra vomitum sanguineum, aliis remediis frustra adhibitis, maxime profuisse expertus est. An urinam ciet, aut calculum renum pel-lat dubitatur. Dioscoride id affirmante, Galeno non consentiente." *R. H. 185.* According to *Lin.* (*Pan. Sueicus*) all the five pecora commonly eat it. *Amæn. Acad. ii. p. 246.*

PRIMULA VERIS.

S E C T. I.

Primula veris, Paralysis, herba Paralysis. offic. Primula veris, odorata, flore luteo, simplici. J. B. iii. 495. T. 124. P. V. major, floribus luteis, odoratis. Dod. 147. P. V. flavo flore, elatior. Clus. H. 301. P. V. major. Ger. 780. R. H. 1081. Syn. 284. Paralysis vulgaris, pratensis; flore flavo, simplici odorato. Park. par. 244. Verbasculum pratense odoratum. B. P. 241. H. Ox. ii. 554. Primula foliis denticulatis, rugosis; limbo corollarum concavo. H. Cliff. 51. Common Cowslip or Paigle.

It grows on pasture grounds, flowering in April. The flowers, leaves, and roots are used. In the *old London Pharmacopœia*, which ours hitherto follows, there is a paralysis very distinct from the *primula veris*. The paralysis being the plant above designed, and the *primula veris*, the *primula veris floribus ex singularibus (pediculis) pallidis, majoribus, simplicibus. J. B. iii. 497. (T. 125.) Primula veris vulgaris, Park. 535. R. H. 1080. Syn. 284. Verbasculum*

culum sylvaticum, majus, singulari flore. *B. P.* 241. or the common primrose. Which indeed is more common here: but the flowers are not so odoriferous; otherwise they do not differ; and can scarce be called different species. According to the said London Dispensatory, paralyseos herba & flores, primulae veris herba & radix, are used: according to the Edinburgh Dispensatory, paralyseos flores & primulae veris herba & radix: though the herba (rather folia) and radix of both are equally good, and no way distinguishable. I make the primula veris and paralyfis synonyma, and choose the most odoriferous, as Hoffman directs, and Schroder, *Ph. Leid.* and many others do. Paralyfis flores, verbasculi pratensis odorati. *B. P.* "Primulae veris majoris, *Raii.*" *Pb. Lond. Nov.* (p. 15.) which has thrown out the other.

"Primulae veris quod primo vere floreat. *Dioscorid.* l. 4. c. 104. φλομίδες, & *Plinii*, l. 25. c. 10. Phlomides censentur. Aliis vero *Plinii*, l. 25. c. 4. & l. 26. c. 11. Dodecatheon, cui sunt folia septem, lactucis simillima, a lutea radice exeuntia. Verum apud *Plinium*, l. 25. c. 10. Alterum genus alismatis in sylvis, nigrius, majoribus foliis videtur." *B. P.*

S E C T. II.

It is deterfive and aromatic, like the lilium convallium; called cephalic and anodyne; and commended in the palsy, apoplexy, epilepsy, want of sleep, &c. This may be used like tea. The conserva florum was left out of the Pharm. Edinb. 1744. There is a syr. florum paralyfis in the New Lond. Disp. Folia & radix internally used are reckoned vulnerary, deobstruent, and diuretic; and externally, anodyne and discutient.

"*Offic.* Flores ac folia. Calfacit leniter, siccatur fortius; saporis est subacris & subausteri; subastringit; anodyna est. *Usus praecip.* in affectibus capitis, apoplexia, paralyfi; in articularum doloribus. Extrinsecus in arthritide ac tumoribus, qui ictus venenatorum animalium subsequuntur. N. acetum radicibus impregnatum, ac loco errhini in nares attractum, odontalgiam mirabiliter sedat. *Præpar.* 1. Aqua ex integra herba, (caule, foliis ac floribus. 2. Conserva ex floribus." *Schrod.* 655. Folia aperientibus deterfivis ad ulcus pulmonum annumerantur in *Boerb. Lib. de M. M.*

1. It is of an herbaceous, soft, bitterish, but not disagreeable taste, and somewhat odoriferous: the flowers smell sweeter than the root or leaves. "Radix est sapore subastringente, odore suavi, aromatico." *J. B.* "Radicis sapor subadstringens; floris odor validus & non ingratus." *R. H.* "Tota saporis est herbacei, flores odoris grati." *Nucl. Belg.* 235. It is used as a pot-herb, fallet, &c. in England. "Primularum folia & flores gustu non ingrato, in olera, placentis & acetariis fumuntur, suntque admodum amica & utilia capiti & nervoso generi. Adhibentur in apoplexia, paralyfi & articularum doloribus." *R. H.* 1082.—2. The flowers analysed give much acid, little urinous spirit, no volatile salt, a considerable quantity (*affez*) of oil and earth. They contain a sal volatile oleosum aromaticum, pretty temperate; are aperitive, &c. *T. Hist.* p. 520. *An recte?*—3. This plant is much commended in diseases of the head and nerves, &c. and may be used any way. "Florum succus maculas rugasque faciei, & alia cutis vitia, mirifice detergit. Aqua florum,

“florum, & conserva, nec minus syrupus, anodyna sunt & hypnotica. Infusa, decocta, & extracta primularum veris cujuscunque generis, anodyna & hypnotica sunt benigna & innoxia, iis qui tenerioris sunt seu ætatis seu constitutionis apprime idonea: *D. T. Robinson*. Decoctum radicum. P. V. vulgaris, in Zythogalo, aliove idoneo vehiculo sumptum, singulare est & præsentissimum remedium ad vertiginem: *D. Hulse*. Succus foliorum & florum expressus, cum pari quantitate lactis vaccæ rubræ, frequenter haustus, cephalalgiam inveteratam perfecte curavit, cum alia medicamenta nequicquam tentata fuissent: *Idem*. Paralytin lateris sinistri curavit *Tho. Bartholinus* spiritu frumenti, cui herba paralytis incocta erat, ut ipse refert.” *Ephem. Germ. An. 2. Obs. 2. R. H. 1082.*

“Flores sunt ex illis suaveolentibus & vaporosis, quæ blandum somnum conciliant: eximiam præstant virtutem in epilepsia & affectibus spasmodicis: non solum effrenatum, sed & impotentem motum generis nervosi corrigunt, hinc valent ad paralytin, apoplexiam, &c. Vi anodyna conducunt ad rheumatismum, arthritidem, &c.” *Nucl. Belg. 235.* “Flores virtute traumatica quoque, æque ac folia gaudent. In balneis antiparalyticis, item in cucuphis adhibentur. Radix commendatur in febribus, calculo renum, herniis & lumbricis.” *Boecler. in Herm. Cynof. p. 596. Vide Matth. p. 802. J. B. iii. 496.*

“Accipio vim siccatoriam in floribus, e quibus parata conserva, non minus efficax sit in paralyti, quam lilii convallium. Requiritur autem hic præcipue diligentia pharmacopœi, ut quam odoratissimos flores habeat. Tanta enim illorum latitudo, ut quidam sint prorsus inodori. Illorum aqua stillatitia, epilepsiæ etiam commoda est.” *Hoffman. p. 432.*

PULEGIUM. Vide p. 181.

R O S A.

S E C T. I.

1. Rosa alba. *offic.* Rosa alba, vulgaris, major. *B. P. 482. T. 637.* Rosa alba. *Tab. Ic. 1083. Ger. 1260. R. H. 1478.* Rosa Anglica, alba. *Park. Par. 412.* Rosa candida plena, & semiplena, *J. B. ii. 44.* Rosa alba. *offic. Dale 293.* The common White-Rose.

2. Rosa damascæna, Rosa pallida. *offic.* Rosa purpurea. *B. P. 481. T. 637.* Rosa rubello flore multiplicato, sive pleno, incarnata vulgo. *J. B. ii. 36.* Rosa provincialis, major. *Tab. Ic. 1084.* Rosa provincialis, sive damascæna. *Ger. 1261.* Rosa damascena. *Park. Par. 413. R. H. 1468.* Rosa pallida, *Lob. Adv. 446.* The Damask-Rose.

3. Rosa rubra. *offic.* Rosa rubra, multiplex. *B. P. 481. T. 637.* Rosa rubra. *Ger. 1260. R. H. 1468.* Rosa Anglica rubra. *Park. par. 412.* Rosa rubra, flore valde pleno & semipieno. *J. B. ii. 34.* The Red-Rose.

4. Rosa sylvestris, Cynosbatus, Cynorrhodon. *offic.* Rosa sylvestris, vulgaris, flore odorato, incarnato. *B. P. 483. T. 638.* Rosa sylvestris. *Tab. Ic. 1088.* Rosa sylvestris alba, cum rubore, folio glabro. *J. B. ii. 43. Fl. Lap. § 202.*

Rosa canina, inodora. *Ger.* 1270. Rosa sylvestris inodora, five canina. *Park.* 1017. *R. H.* 1470. *Syn.* 454. The Common Briar, Dogs-rose, or Hip-tree.

The last, and five or six more (species *an* varietates?) are indigenous. There are cultivated here many varieties. "Solus Clar. Boerhaavius in suo paradiso, circiter 70 distinctas varietates, e toto orbe conquistas, vivas colat. Nos de rosarum catalogo parum solliciti sumus, quamdiu species distinguere non novimus; omnes enim quæ in hortis extant, plenæ & monstræ sũnt, nec species determinatæ in rosis ab ullo sunt; nec possunt ab alio, quam qui in locis natalibus examinet, describi. Descriptiones datæ sunt varietatum, non specierum notæ. Variant dein fructu non minus quam pyra & poma." *Hort. Cliff.* 191.

The capitula, cortex or periantheum, called also alabastris, antheræ, or yellow apices, capillamenta, folia seu petula, foliorum ungues, fructus, fructus lanugo, & semina or arilli, have been reckoned among the medicinal simples. Vide *R. H.* 1468. besides the spongia cynosbati, improperly called bedeguar. "Est enim bedeguar Arabum, cardui genus." *B. P. J. B.* &c. with the insects it contains. But the fruit of the hip-tree. (our *Pharm.* adds spongiolæ) & floris folia, or petala of the rest, are almost only used.

"Rosam vetustas ex sanguine Veneris, & Turcæ ex sudore Mahometis ortam sibi persuadent, cujus nomine folia rosarum humi jacere non patiuntur." *B. P.* Much has been written on roses. There is a *Cynosbatologia ad Normam Acad. Nat. Cur. adornata*, by *Ekrenfridus Hagendornius*. *Jenæ* 1681. in 8vo. Also, *Joan. Caroli Rosenberghii Rhodologia, seu Philosophica-Medica generosæ rosæ descriptio*. *Argentinae* 1628. in 8vo. *Sequierius*, in *B. B.* calls him *Joan. Jacobus Rosenberghius*; and names ten or twelve authors more upon this subject.

S E C T. II.

The flowers are aromatic, purgative, and subastringent; called cordial and analeptic; and commended internally wherever a mildly-exciting, corroborating, and gently evacuating medicine is wanted, as in many weaknesses, lowness of spirits, want of appetite, fluxes, vomitings, consumptions, &c. and externally for pains, inflammations, watchings, sore eyes, throats, &c. The damask is most odoriferous and cathartic; the red more astringent; the white is little used. Hips are called cooling, pectoral, stomachic; but seem to be rather an aliment than medicament.

"*Offic.* Flores, anthera, i. e. capillamenta. *Vires.* Rosæ ut variant generibus, ita & qualitatibus.—Sunt enim non sine causa rosas partim calidas & acres, partim frigidas volunt, caloremque residere in superficie, a frigore scilicet eo expulsum, qui in marcescentibus evanescit. In genere tamen omnes refrigerant 1. ac astringunt; spiritus vitales animalesque re-creant ac roborant. Pallidæ seu incarnatæ laxant; rubæ ac albæ astringunt, (alba lævius, rubra fortius). *Ufus præcip.* in fluxionibus, febribus, siti, appetitu prostrato, &c. Extrinsecus in vomitu, cephalalgia, vigiliis, dolore aurium, gingivarum sedandis, recti intestini (cum vino coctæ & impositæ) in ulceribus & inflammationibus oris, faucium, oculorum. An-
"thera.

“theræ exiccatae immiscetur dentifriciis ad gingivarum astringentem, fluxionumque exsiccationem.” *Schrod.* 664. Where are thirty-seven *præparata*.

“Cynosbati officin. Flores, fructus, spongia, & interdum radix. Vires. Flores conveniunt in qualitatibus cum rosis sativis, sed majorem vim astringendi habent, proinde in profluvio uteri rubro & albo, summæ sunt æstimationis. Fructus vi lithontripica maximopere commendantur, in quâ tamen excellunt exempti arilli. Spongiæ itidem calculosos efficacissime juvare dicuntur, & imprimis qui inibi continentur lapilli ac vermiculi, quorum hi quoque ad lumbricos fugandos commendantur. Radix spicula ex corpore extrahit, imposita. *Præp.* Fructus conditi, Rob. Cynosb. spiritus seu aqua spongiarum, & spiritus alcalisatus.” *Schrod.* 580.

1. The flowers of them all are of a sweetish taste at first, then bitterish, and subastringent; and of a pleasant smell, the damask being the most fragrant. “Rosa rubra, odoris gratia & suavitate quamvis albam superat, damascenæ neutiquam conferenda est. Folia (vero) probe exsiccata & reposita, tum colorem tum odorem diutius retinent, quam damascenæ folia, quantalibet cura & diligentia asservata.” *J. B.* “Odor rubræ quamvis satis validus est, nobis non admodum gratus videtur.” *R. H.* 1468. “Rosæ damascenæ flores dum virent odoratiores sunt rubris & albis, imo omnium, non dico rosarum sed florum in genere longe odoratissimi, ut quæ halitu suo suavissimo sensum mirifice oblectant, citra ullam omnino offensionem aut satietatem.” *Ibid.* “Rosæ omnes habent odorem aromaticum gratum, & saporem subacrem & austerum.” *Nucl. Belg.* 246. They lose much of their scent by drying: decocting, yea bruising, almost destroys it; only the red dried smells rather sweeter than when succulent. So—2. Our senses discover in roses an agreeable, and as it were chearing aromatic spirit, to which its cordial virtues are attributed, and which can only be separated by distillation; which also shews it to be lodged in a subtil essential oil (indicibilis suavitaris) and in a very small quantity: also a diluent and bitterish juice, probably saline, to which they owe their purgative quality: and likewise their astringency is evident to the taste, and greater, or more observable, in the red than in the other two; which mixing a solution of green vitriol with their infusions also confirms. None of these are excessive in degree, but all very friendly to nature. Hence they are anodyne, but not narcotic; strengthening, but not constipating. And—3. Commended and used both outwardly and inwardly in many diseases. Vide *Dod.* 189. or *R. H.* 1476. “Egregias vires & efficaciam medicamentorum e rosis præparatorum in phthisi, podagra, calculo, canum rabidorum morfu, capitis doloribus aliisque morbis, in fluxibus alvi aliarumque partium, in febribus, hæmorrhagiis, vulneribus, inflammationibus, insectorum puncturis, scorbuto, mobilitate dentium.” Vide apud *Car. Rosenbergium in Rhodologia sua.* *R. H.* 1477. Astringency is the principal quality of all the other parts of the roses. “Radix sylvestris rosæ ad morsum canis rabidi unicum remedium, oraculo repertum; uti *Plinius*, l. 8. c. 41. scribit.” *Dod.* 190. “Ad canis rabidi morsum vero unico remedium oraculo quodam nuper (invento) repertum, radix sylvestris rosæ, quæ cynorrodos appellatur.” *Plin.* l. 8. c. 41. p. 195.

S E C T. III.

They may be used any way as far as ounces. The preparations from them are various, as syrupus de rosis siccis, mel rosatum, conserva rosarum, acetum rosaceum, oleum rosarum coctum, tinctura rosarum (in all which the red roses are ordered) syrupus rosarum pallidarum, and aqua rosarum pallidarum. Vide *Hoffman*. p. 60. § 27—42.

R O S M A R I N U S.

S E C T. I.

Rosmarinus. *offic.* Rosmarinus hortenſis, anguſtiore folio. *B. P.* 217. *T.* 195. *H. Ox.* iii. 410. Rosmarinum coronarium. *Dod.* 272. *Ger.* 1292. Rosmarinus coronarius, fruticosus. *J. B.* 225. *R. H.* 515. Libanotis coronaria, ſive Rosmarinum vulgare. *Park.* 74. p. 425. Rosmarinus. *H. Cliff.* 14. Common Rosemary.

It grows wild in South-France, Spain, Italy, &c. In our gardens it flowers in April. The leaves, tops, and flowers, are uſed. “*Offic.* Folia, flores (ſpecialiter anthos *offic.*) ſemen.” *Schrod.* 665. “Folia, flores.” *Ph. Edin.* “Summitates, flores.” *Pharm. Lond.* rectius. “Λιβανωτις. *Dioscorid.* l. 3. c. 89. ab odore thuris nomen habet. *Galeno* 7. ſimpl. λιβανωτις ſτεφανοματικα, quod ea ſτεφανοπλοκει, coronarii, ad corollas utantur. Genera tria fecit Dioſcorides & Galenus. . . Plinio, l. 24. c. 11. genera duo; alterum ſterile; alterum cui & caulis & ſemen reſinaceum, quod cachrys vocatur: foliis odor thuris. *At.* l. 19. c. 12. Rosmarinum coronarium, cum aliis ſpeciebus confundit. Hic de coronario agimus, quem aliqui cneoron nigrum Theophrasti, & caſiam Hygini volunt.” *B. P.* “Galenus, 7. ſimplicium, expreſſe ait Romanos (λιβανωτιδα ſτεφανοματικην) ρεσμαρινον vocaſſe. Ex quo impugno vulgarem morem declinandi, ut reſpublica, & alia talia. Si enim, ut Ill. Scaliger me docuit το rus non eſt Græcum, ſed Syriacum, & ſignificat idem quod ἑρυθρος, nec declinationem Græcam admittit, multo minus Latinam. Sed ita eſt, in horto medico inter botanicos licent talia.” *Hoffm.* p. 437. Pliny has it often roſmarinum (n. g.) alſo in Accuſ. and yet in the title, c. 11. lib. 24. it is De rore marino, &c. It is thought to be the *roſ. Virgil.*

“Nam jejuna quidem clivoſi glarea ruris.

“Vix humiles apibus caſias roremque miniſtrat.” *Georg.* ii. v. 212.

“Libanotes quam Romani ροσμαρινον vocant, quaque coronarii utuntur, virgultis eſt tenuibus, circa quæ folia exeunt minuta, denſa, oblonga, & gracilia, ſubter incana, ſuperne virentia, (βαρυσεμα) gravi odore. Vi porro excaſtoria pollet, regiumque morbum ſanat, &c.” *Dioscorid.* l. 3. c. 89. P. 209.

S E C T. II.

It is a ſtimulating antifeptic, attenuant, diaphoretic, and carminative; more penetrating and more agreeable than lavender; called cephalic, cordial, Vol. II. E e nervine

nervine and uterine: and is recommended internally in the vertigo, apoplexy, lethargy, palsy, epilepsy, asthma, palpitation of the heart, faintings, fluor albus, sterility, &c. and outwardly for swellings, contusions, inflammations, gangrenes, fistulas, &c.

"Calfaciunt & siccant 2. lenta incidunt, saporis sunt mixti, acris, amari, subastringunt, cephalica sunt e præcip. ut et uterina. *Ujus præcip.* in affectibus capitis ac nervorum, apoplexia, epilepsia, paralyfi, vertigine, caro, &c. Visum acuunt; foetorem anhelitus emendant; epatis, lienis, ac uteri obstructions resolvunt. Ictero ac fluori albo mulierum medentur, corque confortant. Extrinsecus profunt in catarrhis (suffitu) & exinde natis affectibus, in utero corroborando, &c. N. flores asservari possunt per biennium. *Præp.* 1. Aqua, e planta integra. 2. Oleum stillat. 3. Balsamus fit ex oleo. 4. Conserva, ex floribus anthos. 5. Species dianthos." *Schrod.* 665. Acria aromatica sunt, & uterina, in *Boerb. Lib. de M. M.*

1. It is of an acrid, aromatic and bitterish taste, and fragrant, resinous and comforting smell; the flowers are rather milder and more agreeable. "Rosmarinus suffrutex jucundissimi odoris, thus, & dolentis." *J. B. R. H.* "Odoris est valde grati, aromatici; saporis calidi, grati." *Nucl. Belg.* 247.—2. It abounds with a penetrating, essential, and balsamic oil, very friendly to nature, though greatly exciting and stimulating. "Solo usu olei rosmarini chymici propinati in decoctis idoneis ante paroxysmum, multas febres tertianas exquisite curatas esse in nosocomio Parisiensi, observavit *M. Jacques.*" Dosis gut. iv. vel v. *Sim. Paulli Q. Bot.* ii. 133. *R. H.* "Herba ipsa suffitu & vapore suo, pestis tempore aerem emendat, & salubrem reddit. Fumus ore haustus peti in modum, utilis censetur adversus tussim, phthisin, & tabem pulmonum. Semen cum vino haustum ad icterum commendat *Miraldus.* Diarrhoeam trimestrem desperatam vino rosmarini curatam refert *Velschius.* Ad visum acuendum conducunt flores, &c." *Vide R. H.* 515. See there the whim concerning rosemary-combs in *France.*

S E C T. III.

It may be used like lavender. The preparations are, conserva florum anthos, oleum herbæ rosmarini, & aqua reginæ Hungariæ. The flores are used in the aqua pæoniæ composita, tinctura cephalica; the herba in the unguentum nervinum; the oleum in the spiritus lavendulæ compositus, spiritus salinus aromaticus, balsamum ad apoplecticos, balsamum saponaceum; and the conserva in the electuarium cardiacum.

Florum anthos appears a tautology; and is so, if by rosmarini flores be not understood the flowers with the flower-cups; and by florum anthos the picked flowers without their cups.

"Aqua R. Hungariæ is thus prepared—℞ Florum anthos ℥ij. vini rectific. ℔iv. Flores recentissimi statim subjiciantur distillatione ex B. M." *Pb. Edinb.* p. 37. *Charas* orders florum ℔iv. spir. vin. ℔vi. and ℔iv. to be drawn off. *Pb. Roy.* 631.—"Spiritus rosmarini of the Pharm. Lond. is—℞ summitatum rosmarini recentium ℔i℔, spiritus vinosi tenuioris cong. i. distilla balnei calore donec eliciantur ℔v." If it be as good as the former, it

it must be much cheaper. Are any of them equal to that brought from France? Vide *James's Disp.* p. 646. and *Lem. Pharm.* 525.

R U T A.

S E C T. I.

Ruta, Ruta hortenſis. *Offic.* Ruta hortenſis, latifolia. *B. P.* 336. *T.* 257. Ruta graveolens, hortenſis. *Dod.* 119. Ruta fativa, vel hortenſis. *J. B.* iii. 197. *R. H.* 874. Ruta hortenſis. *Ger.* 1255. Ruta hortenſis major. *Park.* 132. Ruta hortenſis major, latifolia. *H. Ox.* ii. 507. Ruta, foliis decompositis. *H. Cliff.* 145. Common or Garden-Rue; by ſome Herb-of-grace.

It grows in Spain, &c. In gardens it flowers in June. The leaves, flowering tops, and fruit, or ſeeds with their ſeed-veſſels, are uſed. "*Offic.* Herba " ac ſummitates, cum feminibus." *Schrod.* 668. " Herba, ſemen." *Pharm. Edinb.* " Folia." *Pharm. Lond.* " Ruta, ῥυτη (for ſo it is called in Greek, " as well as πηγανον) ἄψυω, ſervo, quia (ut *Dioſcor.* ait) valetudinem conſervat." Et e *Plutarcho*—" Aiunt facultate ſua πηγανον dictum, quod ſiccitate ſua & calore condenſet & coagulet ſemen. Hinc uterum gerentibus " inimicum eſt." *R. H.* 874. *Dioſcorides*, l. 3. c. 52. p. 193. is long on the virtues of πηγανον; but does not deſcribe it, though he compares the leaves of a great many plants to the folia rutæ; as of the ambroſia, ſerpillum, hypericum, hypericum, and roſæum, polygonum, polemonium, peplos, apios, & trifolium aſphaltites. More of it is to be found in *Theophraſtus*. Vide *Bodæum* 797.

S E C T. II.

It is antacid, acrid, detergent, diaphoretic and diuretic, powerfully diſſolving as well as ſtimulating; called alexipharmic, cephalic, nervine and uterine; and is commended internally in malignant fevers, peſtilence, poiſons, bites of mad dogs, ſerpents, &c. in cachexies, ſcurvies, agues, palsies, epilepſies, palpitation cordis, vapours, melancholy, worms, &c. and outwardly, for pains, inflammations, tumors, gangrenes, &c.

" Calſacit & ſiccat 3. incidit, attenuat, digerit, diſcutit; eſt alexipharmaca " cephalica ac nervina. *Uſus præcip.* in variis morbis, peſte, aliſque affectibus " malignis præſervandis ac curandis, veneno arcendo, viſu acuendo, laſcivia " reprimenda, pleuritide curanda, imbecillitate ventriculi corrigenda, colica " diſcutienda, morſu canis rabidi debellando, &c. Extrinſecus in ictibus ſerpentum, carbunculis, in februm paroxyſmis arcendis (inuncto dorſo) cephalalgia ex craphula, hemicrania, in febris malignis (pro epithemate pulſuum cum ſale communi & aceto) in dolore capitis, februm ardentium " & malignarum (ſimiliter pedum plantis adhibita). N. nimius uſus internus " officiit gravidis. *Præp.* 1. Aqua ſtillat. ex planta cum cauliculis Maio collectis. 2. Oleum ſtillat. 3. Oleum infuſum, ex infuſa herba in oleo " communi. 4. Sal ex herba incinerata. 5. Acetum ex infuſione. 6. Bal-

“sams ex oleo stillatio.” *Schrod.* 668. Antacida, alcalescens, scorbutica
 “lenior, acris aromatica, & uterina est, in *Boerb. Lib. de M. M.*
 1. It is of an hot, biting, bitter, disagreeable taste, and strong fetid smell.
 “Coma rutæ acrem, aromaticum, interimque gravem spirat odorem; sapore
 “amaro, fervido, tenui palatum excalfacit; maxime viridia adhuc florum
 “capitula.” (*E Cordo*) *R. H.* The seed-vessels are also very strong, and are
 said to abound most with oil. “Semina saporis ingrati, odoris gravis. In
 “capsulis seminalibus omnis vis concentrata, ex illis enim plus olei extrahitur,
 “quam ex integris feminibus & caulibus.” *Herman. Cynof.* 296. “Rutæ vis
 “concentrata consistit in capsulis seminalibus.” *Ibid.* p. 485. Yet the oleum
 rutæ essentialis is directed to be distilled from the folia only. *Pb. Lond.* 36.—
 2. Summitatum thea is of a citron colour, very transparent, and tastes and
 smells of the herb. It reddens somewhat the sol. heliotropii, but ol. tartari
 does not alter this redness. Sol vitrioli turns it to a dark green, though it is
 still pellucid and without precipitation. Sp. vitrioli weakens the tincture of
 the tea, and destroys its smell, which in the other mixtures is not altered.—
 3. Though the acrimony of rue is very penetrating, and much flies off in
 drying, yet the simple water is not very strong. “Tantæ est acrimonie ut
 “per triplices chirothecas ad legentis manus penetrare, non semel expertus
 “sum: & si quis, qua eam decerpserit manu, faciem demulceat, illico vehe-
 “mentem inflammationem excitat, quemadmodum rectissime scripsit Diosco-
 “rides.” *Clus. H.* ii. 136. Where see the effect this ruta montana had on
 his companion, who put some of it into his hat.—4. I have not observed it
 infested with insects; and it is said to be hated by toads, and therefore planted
 among sage. Hence “*Salvia cum ruta faciunt tibi pocula tuta*; as some apply
 it.—5. It inflames and ulcerates the skin, like horse-radish: hence outwardly
 it is a remarkable drawer, detergent, &c. and inwardly is commended for
 the gonorrhœa, small-pox, measles, lethargy. Convenit quoque satyriasi &
 priapismo. *Herman.* l. c. It is said to have been a principal ingredient in *K.*
Mithridates’s antidote, according to the receipt found with him when con-
 quered by *Pompey*. “In sanctuariis Mithridatis maximi regis devicti, Cn.
 “Pompeius invenit, in peculiari commentario ipsius manu, compositionem
 “antidoti, e duabus nucibus siccis, item ficis totidem, & rutæ foliis viginti
 “simul tritis, addito salis grano: & qui hoc jejunos fumat, nullum venenum
 “nociturnum illo die.” *Plin.* l. 23. c. 8. p. 604. lin. 1. *Serenus Samonicus*
 (qui floruit circa an. 240.) thus describes it:

“Antidotus vero multis Mithridatica fertur
 “Confociata modis: sed magnus scrinia regis
 “Dum raperet victor, vilem deprehendit in illis
 “Synthesin, & vulgata satis medicamina risit.
 “Bis denum rutæ folium, salis & breve granum,
 “Juglandesque duas, totidem cum corpore ficus;
 “Hoc oriente die parco consperfo Lyœo
 “Sumebat, metuens dederat quæ pocula mater.”

The *Schola Salernitana*, c. 37. p. 427. celebrates it thus:

“Nobilis

- “ Nobilis est ruta, quia lumina reddit acuta;
 “ Auxilio rutæ, vir lippe videbis acute;
 “ Cruda comesta recens, oculos caligine purgat.
 “ Ruta viris minuit Venerem, mulieribus addit *.
 “ Ruta facit castum, dat lumen, & ingerit astum.
 “ Cocta & facit ruta de pulcibus loca tuta.”

Vide quæ habet Renatus Moreau in Animad. p. 432.

“ Ruta (πῦραρον) urinam magis quam alvum movet. Quandam etiam co-
 “ gendi vim habet; & præpota adversus venena valet.” *Hippoc. de vietus rat.*
l. 2. Foef. p. 359. l. 34. “ Ad omnem puerperii-purgationem si non probe
 “ respondeat. . . Bibat crethini semen & seselios; ac πῦραρον καρπον, aut suc-
 “ cum, ita ut utriusque obolos duos simul tritos, ex vino meraco exhibeas,
 “ si non febricitet.” *Hippoc. de Morb. Mul. l. 1. p. 624. l. 37.* Who also
 frequently orders the folia & radix.

“ Ruta utraque (sylvestris & hortensis) urendi vim habet, calfacit, exulce-
 “ rat, urinam ciet, menses ducit, ac tum cibo tum potu alvum sistit. Semen
 “ acetabuli mensura, e vino bibitum contra lethalia medicamenta est pro anti-
 “ doto. Quin & folia per se præsumpta, aut cum nucibus juglandibus aridifi-
 “ ve ficis, venena irrita & inefficacia reddunt; & contra serpentum ictus va-
 “ lent. Genituram seu esitata seu bibita ruta extinguit. . . Si montana sub
 “ id tempus quo florere incipit, ad muricæ condituram colligatur, cutem rube-
 “ facit, ac inflat, cum pruritu & vehementi inflammatione. Ea itaque unctis
 “ antea manibus & facie colligere oportet. Tradunt & succum gallinaceis
 “ pullis inpersum feles arcere, &c.” *Vide Diosc. l. 3. c. 52. p. 193.* where
 it is commended in many diseases, both outward and inward; and particular-
 ly the epilepsy: as it is also by many moderns. *Vide R. H.* But its anta-
 phrodisiac virtue I reckon imaginary.

S E C T. III.

The fresh herb may be given, or its juice, with wine, &c. or used like tea
 to ʒβ or ʒj. the aqua rutæ to ʒiv. oleum essentiale ad gut. v. well rubbed with
 sugar and diluted. Rue is in the aqua alexiteria, aqua bryoniæ composita,
 aqua pæoniæ composita (in the first folia, in the second herba, and in the third
 summitates, *Cur?*) aqua theriacalis, unguentum vermifugum; and the
 oleum essentiale is in the pulvis vermifugus, & unguentum nervinum. We
 have also an oleum rutaceum coctum, and a conserva foliorum, which is good
 only while recent.

The aqua rutæ should be distilled from the fresh leaves and tops, with the
 flowers, and also green fruit on them. It is of signal use for the fits and
 gripes of children; as well as hysteric mixtures, &c. I remember the great
Boerhaave said of it in the garden, *Dolia ejus quotannis absumo.* *Vide* also his
Chem. ii. p. 77. For the oil the fruit should be further advanced. Does it
 need any other drying?

* N. B. “ An revera ita res sese habeat merito ambigitur.” R. H.

In the aqua epidemia, *Pb. Ed.* 1744. there are five of the ingredients which were in the former editions excluded, viz. valeriana sylv. melissa, ruta, semen levistici, & bacc. juniperi; of which as good an aqua epidemia may be obtained as from what remain, if not a better. "Of these which now remain" the two first are perhaps the most liable to objection of any. Nor is the "zedoary a substance proper for this treatment." *Lewis Pharm.* p. 113. Whereas the imperatoria and zedoaria are the best ingredients in it; the petasitis, serpentaria, scordium, and baccæ lauri contributing little to its virtues.

S A B I N A.

S E C T. I.

Sabina, Savina, *Offic.* Sabina, folio tamarisa Dioscoridis. *B. P.* 487 Sabina. *Dod.* 854. *Lob.* 625. Sabina sterilis. *Ger.* 1376. *J. B.* i. 2. 288. Sabina vulgaris. *Park.* 1027. *R. H.* 1415. Sabina mas. *Tab. I.* 945. Juniperus, foliis inferne adnatis, oppositionibus concatenatis, mas. *H. Cliff.* 464. Common Savin.

It grows without any culture in Italy, &c. The tops are used." "*Offic.* "Folia." *Schrod. Pb. Ed.* and *Lond.* malè. "*Usu.* summitates." *Dale* rectius. "Sabina Latinis dicta a Sabinorum regione. . . Sexu differre videtur: "est enim duplex, 1. mas, seu sterilis, quæ flores duntaxat profert, non "fructum: cujusmodi se Montbelgardi vidisse *J. B.* narrat læpius florentem, "verum nullas unquam baccas in ea observasse, sterilem etiam mansisse variis "in locis a se plantatam. 2. Fœmina, seu fertilis, quæ baccas profert, non "flores. Botanici plerique sabinam vulgarem omnino sterilem faciunt. Ve- "rum id naturæ analogiæ repugnat, & *J. B.* differte affirmat eam baccas pro- "ferre. In nostro solo & cœlo raro, forte nunquam, fructum edit. At in "loco natali, *Amani & Olympi Phrygiæ*, cacuminibus proculdubio ferax est." *R. H.* 1415. Not observing that his Sabina vulgaris is the mas, seu sterilis; and his Codrus the baccifera fructu minore, cœruleo, (*Ibid.*) or Sabina folio cupressi. *B. P.* 487. . . Sabina baccifera. *J. B.* i. 2. 288. *Ger.* 1376. is the Sabina fœmina seu fertilis. It is (probably, if not certainly) the *βαβυς*, *Græcorum*.

"Sabinam (*βαβυς*) nonnulli *βαρυπρον* appellant: cujus duo sunt genera. "Unum foliis quidem est cupresso simile, at spinosius, graveolens, acre, ac "serventis naturæ. Curta est arbor, ac sese magis in latitudinem fundit: "foliis quidam ad suffitus utuntur. Alterum genus est folio tamarici simile. "Utriusque folia . . . cum vino pota, sanguinem per urinas educunt & partus "expellunt: id ipsum tum appositum, tum etiam suffitu præstant." *Diosc.* l. 1. c. 104. p. 55. I find it not in *Hippocrates*. It is Sabina in *Pliny*. l. 24. c. 11.

S E C T. II.

It is an acrid stimulating diuretic and emmenagogue, called ecbotic; and is commended internally for obstinate female obstructions, hard labour, retention

of the secundinae, gonorrhœa, worms, &c. and externally for scabs, spreading ulcers, tooth-ach, warts, &c.

“Calfacit & siccat 3. partium est tenuium, incidit, attenuat, discutit, *Ufus præ ip.* in mensibus fortiter ciendis, foetu ejiciendo, urina pellenda, asthma medendo. Extrinsecus in affectibus uterinis, ulceribus, serpentibus arcendis, scabie, præcipue capitis infantum, exsiccanda ac curanda (cum cremore lactis), in maculis faciei abstergendis. *Præpar. aqua ex foliis.* *Schrod.* 669.

1. It is of an acrid bitter taste, and ungrateful smell. “Odore gravi est, sapore acri.” *J. B.* “Odore gravi & ingrato, sapore acri.” *R. H.* “Saporis est ingrati, fere instar terebinthinæ, sed multo acrioris, odoris fortis & ingrati.” *Nucl. Belg.* 250.—2. It is said to kill worms in horses, cows, dogs, as well as in children. “Oleum Sabinæ ventri inunctum, aut frondes ejus tustæ & umbilico impositæ, vermes puerorum enecant. Decoctum intro sumptum idem præstat. Verum usum ejus internum minus tutum putat Parkinsonus. Nos tamen novimus succi expressi cochl. 1. cum lacte mixt. saccharo edulcoratum, maximo cum successu pueris verminantibus exhibitum. Estque sane medicamentum efficacissimum & minime periculosum, quod post alia multa incassum usurpata, optatum sæpenumero, ne dicam semper, sortitur effectum, etiam in deploratis pene. Equis etiam & bobus in eundem usum frequenter exhibetur.” *R. H.* 1416.—3. It is commended also in the jaundice, dropsy, asthma, gout, fluor albus, corns, &c. Vide *Boecler. in Cyn. Herman.* p. 488. Also for the vermis umbilicalis. *Sennert.* (prax. l. 3. par. 10. c. 4.) “Pene infamis facta est apud nos, quod nobile ἀντίκον sit apud vulgus.” *Hoffman.* 440. But I doubt of its being so dangerous, as is commonly believed, in pregnancy; though it cannot be often proper there.

S E C T. III.

It may be given dried in powder to ʒß. in infusion to ʒj. the juice to ʒß. or ʒj. oleum to gut. v. aqua to ʒij. The summitates (not folia) are in the aqua bryoniæ composita: folia in the unguentum vermifugum. For the oleum the herba is ordered; which oil is an ingredient in the pulvis vermifugus. “A cataplasm of the seeds, bruised with sal gem and oil, is said to be excellent for an anchylosis.” *James’s Disp.* p. 424. It carries no seed. Vide *Lewis Ph.* p. 232.

S A L V I A.

S E C T. I.

1. Salvia, Salvia major, Salvia hortensis. *offic.* Salvia major; (an spha-celus Theophrasti?) *B. P.* 237. *T.* 180. Salvia major. *Dod.* 290. *Ger.* 764. Salvia latifolia. *J. B.* iii. 304. *R. H.* 509. Salvia major vulgaris. *Park.* 49. *H. Ox.* iii. 399. Salvia, foliis lanceolato-ovatis, integris, crenulatis; floribus spicatis, calycibus acutis. *H. Cliff.* 12. Common-Sage, or Great Garden-Sage.

2. Salvia

2. *Salvia minor*, *Salvia hortensis minor*. *offic.* *Salvia minor*, aurita & non aurita. *B. P.* 237. *T.* 181. *H. Ox.* iii. 400. *Salvia minor*. *Dcd.* 290. *Ger.* 764. *R. H.* 510. *Salvia minor* sive pinnata. *Park.* 50. *Salvia minor* auriculata. *J. B.* iii. 305. Varietas prioris *Linnæo*. Small-Sage, or Sage-of-Virtue.

They grow wild in Languedoc, Italy, &c. In our gardens they flower in June. The leaves, young shoots, and flowers are used. "Et major & minor usualis, sed minor præstantior. *Officin.* Folia, flores." *Schroder.* 669. "Majoris herba, flores: minoris herba." *Pharm. Edinb.* "Majoris folia." *Pharm. Lond.*

"*Salvia*, quod ad multa, præsertim ad fœcunditatem, salutaris sit: cum steriles, hujus usu frequenti gravidæ reddantur, quare Agrippa sacram herbam vocavit, Aëtio auctore. Ἐλελίσφακον Dioscoridi (quasi in tabem reducta, cum herba ipsa semper retorrída & exsucca videatur, id enim σφακος & σφακελος significat; folia enim attritis vestibus comparantur) & ἐλαφοβοσκον, & σφαγγον dicitur. *Plinius.* l. 22. c. 25. (ait) nostri qui nunc sunt herbarii, elelísphacon Græce, Latine salviā vocant, mentæ similem, canam, odoratam." *B. P.*

"*Salvia*, (ἐλελίσφακον) quam alii elaphoboscon, alii sphagnon nominant, frutex est oblongus, ramis numerosis, virgas habens quadrangulas & albicantes; folia mali cotoneæ effigie, sed longiora, asperiora, crassioraque, & attritarum vestium modo, ita parum villosa, ut vix quisquam villos animadvertat, sub albida, vehementer odorata, sed virosa σφοδρῶς ἐνωδῆ, βρωμωδῆ, i. e. vehementer suaveolentia, (vel benevolentia) graveolentia, or vehementer sed graviter fragrantia, or suaveolentia cum gravitate?) Semen summis in caulibus sylvestri hormino simile gerit: in asperis nascitur. Foliorum ramorumque decoctum &c." *Dioscorides*, l. 3. c. 4. Hence, and not without reason, by the consent of all botanists, his elelísphacon is our *salvia*. Though *Mr. Geoffroy* (vide *Artemisia M. M.* iii. p. 121.) knew it not.

S · E · C · T · II.

They are aromatic and astringent, or antiseptic, attenuant, strengthening, and diaphoretic; called cephalic and uterine, and commended internally in the vertigo, palsy, trembling of the joints, obstructions and overflowing of the menses, green-sickness, sterility, cachexy, scurvy, rheumatism, gout, ague, infectious diseases, &c. and outwardly for the aphthæ, ulcers, gangrenes, &c.

"Calfacit & siccat, subastringit, abstergit. *Usus præcip.* est diureticus: menses ob crassitiem remoratos ciet, nimios emendat. Prodest in paralyti, vertigine, tremore, catarrhis. Extrinsecus aphthas oris abstergit (in gargaris.) &c. *Præpar.* 1. Aqua, ex herba cum floribus. 2. Oleum stillat. 3. Sal, ex herba incinerata. 4. Conserva, ex floribus." *Schrod.* 670. Est ex acribus, stimulantibus aromaticis, antiscorbuticis lenioribus, & uterinis, in *Boerb. Lib. de M. M.*

1. It is of a bitterish, aromatic, and astringent taste; and fragrant smell, somewhat heavy. "Folia menthæ foliorum forma . . . odore, eximio, aromatico,"

“ matico, sapore cum aromatica amaritudine acriusculo, & calido.” *J. B.*
 “ Odore & sapore aromatico vehementiore.” *R. H.* “ *Salvia parva optima*
 “ est, saporem habet subamarum, acrem, calidum; odorem aromaticum.”
Nucl. Belg. 253.—2. Green vitriol turns sage tea black like ink.—3. It is said
 that the fresh leaves (and juice) cure the prickings (puncturas) of wasps and
 spiders in the *Ephem. Germ.* as quoted in *R. H.* 510; and that toads delight
 much to lodge among sage, and sometimes infect it with their poison.
 “ Hinc ex Joan. Boccacio narratur lugubris casus duorum amantium, qui
 “ labiis leviter affricata salvia subito occubuerunt. Paræus audivisse se testatur,
 “ duos mercatores salviam illotam vino immerfisse, eoque epoto, mox, non
 “ sine horrendis symptomatibus, obiisse. Vide *Amb. Par.* p. 596. (it is l. 21.
 “ c. 31. p. 786. edit. Paris. 1585. in fol.) Vix quidem credibile est tam
 “ præsentaneum virus bufonibus inesse. . . Athan. Kircherus (in scrut. pestis)
 “ bufones absolvit, & crimen rejicit in vermiculos, quos microscopii beneficio
 “ infra plantæ asperitatem detexit, comparentibus simul bullulis, velut ovis
 “ animalculorum, quæ virulento suo humore, ingentem homini noxam ad-
 “ ferre possunt: quæ tamen vel digito absterfo folio, aut aqua lota, statim
 “ disparebunt: unde (inquit) veram causam perniciosæ qualitatis salvie non
 “ lotæ collegi. At pace tanti viri, folia decies lota, bullulas istas non di-
 “ ponunt. . . Accuratissimus D. Hooke bullulas has, seu globulos pellucidos,
 “ nihil aliud esse affirmat, quam succum quendam gummosum, quem folia,
 “ ut & caules & flores, exsudent; nam per totum anni decursum, eos hærentes,
 “ & fere nihil mutatos observavit.” *Micrographia* (*Obs.* 24.) p. 142. *H. Ox.*
 iii. 400.—4. Sage however is generally esteemed a wholesome herb, and is
 often eaten in the spring, especially in May, with butter, to purify the blood,
 and preserve health. “ Nonnisi diligenter lota & mundata, says Mr. Ray,
 “ in cibis usurpanda est.” *R. H.* The Chinese are said to prefer it to their
 own tea. Thus the *Schola Salernitana* celebrates sage, cap. 38. p. 406.

- “ Cur moriatur homo cui salvia crescit in horto?
- “ Contra vim mortis non est medicamen in hortis.
- “ Salvia confortat nervos, manuumque tremorem
- “ Tollit: & ejus ope febris acuta fugit.
- “ Salvia, castoreumque, lavendula, primula veris,
- “ Nasturt. Athanas. hæc sanant paralytica membra.
- “ Salvia salvatrix naturæ conciliatrix.”

It may be used like tea, or any other way. We have no preparation of it.
 The summitates are in the aqua pæoniæ composita. The conserva florum is
 omitted in *Pharm.* edit. 1744. unless included in the addit. &c. Some prefer
 the salvia minor, as *Schroder*, *J. B. Nucl. Belg.* &c. The *Lond. Pharm.* the
 major. *Hoffman* makes no difference; nor can I make any. “ The small is
 “ the strongest; the large most agreeable.” *N. Disp.* p. 197. Cujus contra-
 rium est verum. Vide *Ibidem* what is said of aqueous infusions.

SAMBUCUS. *Vide Roots.*

S A N I C U L A.

S E C T. I.

Sanicula, Sanicula minor, Diapensia. *Offic.* Sanicula officinarum. *B. P.* 319. *T.* 326. *H. Ox.* ii. 616. Sanicula. *Dod.* 140. Sanicula mas Fuchsi; five Diapensia. *J. B.* iii. 2. 639. Sanicula five Diapensia. *Ger.* 948. *R. H.* 475. *Syn.* 221. Sanicula vulgaris, five Diapensia. *Park.* 532. Sanicula. *Cæs.* 556. *H. Cliff.* 88. Sideritis tertia. *Col.* i. 124. Common Sanicle.

It grows in woods, thickets, &c. flowering in June. The leaves are used: "Crescit in montibus ac vallibus. Colligitur Junio cum floribus. *Officin.*" "Folia raro radix." *Schrod.* 672. "Usu. Folia." *Dale* 131. "Herba." *Pb. Ed.*

"Sanicula, a sanandis vulneribus nomen traxisse videtur. Doctiss. columna sub sideritide tertia Dioscoridis pingit & describit." *B. P.* "Brunfels, diapensia, fennicula, pelium Hermolai (corol. 739.) pentaphyllon Collinutii; pentaphyllon vero ne sit, cur affirmet non habet, cur neget non videt. Ait vulgo herbariorum diapensiam Græce, Latine ferrariam majorem, & con- solidam minorem dici." *J. B.*

S E C T. II.

It is an attenuant and subastringent vulnerary; and commended in wounds, ulcers, fluxes, hæmorrhages, ruptures, scurvy, rickets, &c. It may be used in substance, infusion, decoction, or any way, ad libitum.

"Calfacit & siccit, adstringit, saporis est amari, vulnerariaque una ex præcipuis, utilis in consolidandis ulceribus, fistulis, rupturis, erosionibus que, tam interne quam externe adhibita. *Præp.* aqua, ex herba florente." *Schrod.* 672. Roborans siccans, excitans, scorbutica, in rachitide propria est *Boerb. Lib. de M. M.*

1. It is of an herbaceous, bitterish, astringent taste, and no smell. "Radix est adstringens. . . Sanicula Fuchsio non est simplicis naturæ, gustu id indicante, adstringit simul & amara est. Statuitur calida & sicca ordine secundo." *J. B.* "Radix adstringens, amara & fervida." e *J. B. R. H.* But *J. B.* does not say the root is amara & fervida. "Saporis subamari, & subausteri." *Nucl. Belg.* 256.—2. "By a chemical analysis, besides several acid liquors, sanicle yields a urinous spirit, some volatile salt, much oil, and much earth. It contains some sal ammoniac, sulphur and terrestrial parts; is deterfive, vulnerary, aperitive." *T. Hist.* p. 531. He mentions not the taste or smell. "It is of a penetrating balsamic virtue, for it has an acrid sort of fragrancy, in which consists its virtues, and leaves an astringent taste in the mouth." *James's Disp.* p. 430. "Vires sunt penetrantes balsamicæ; exhalat enim acre fragrans, in quo consistit virtus, & adstrictionis sensum.

"in.

“ in ore relinquit.” Ita *B. Hist.* pl. dicta p. 116. *stupidè!*—3. Foliorum thea is of a pretty bitter and subastringent taste; it dilutes only syrup of violets; mixed with aqua calcis it becomes yellow, but not of a urinous smell; and a solution of vitriol turns it to a deep bluish-green colour, and causes a small precipitation. Hence it is evidently, though not strongly astringent.—4. While wood-drinks were in fashion, fanicle was more valued and used than it is now. “ Gallis in adagium venit vulgo jactatum, eos non egere chirurgo qui saniculam habuerint.” *J. B.* iii. 2. 640. “ Gallis in adagium venit vulgo jactatum, eos non indigere chirurgo qui saniculam & bugulam habuerint. *Qui ba du bugle & du fanicle, fait aux chirurgiens la nicle.* . . Umbilici emminencia & crassities in pueris innumeris fere curata est cataplasma. ex sanicula in vino cocta, umbilico apposita, cum ligatura strictiore: radice consolidæ majoris contusa dorso, e regione umbilici, admotâ.” *R. H.* 476.

L E C T U R E LX.

S E C T. I.

S A T U R E I A.

Satureia. *offic.* Satureia hortensis, sive Cunila fativa *Plinii.* *B. P.* 218. Satureia. *Dod.* 289. Satureia fativa. *J. B.* iii. 272. *T.* 197. Satureia hortensis æstiva. *Ger.* 575. Satureia hortensis. *Park.* 4. *R. H.* 518. Satureia annua, Cunila dicta, vulgaris. *H. Ox.* iii. 411. Thymus erectus, annuus, foliis lanceolato-linearibus. *H. Cliff.* 306. Summer Savoury.

It grows naturally about Montpellier, &c. sown in our gardens it flowers in July, and ripens the seed in autumn. “ The herb in flower is used.” *Offic.* “ Herba cum floribus.” *Schrod.* 675. “ Herba.” *Ph. Edinb.* “ Satureia, aliis a saturando dicta, quod cibis loco condimenti addatur: alii a satyris nomen traxisse putant, eo quod coitus marcescentes stimulet. *Θυμλεα Dioscorid.* 1. 3. c. 25. *Θυμλερον. Theoph.* 7. hist. 1. dicitur, forte ἀπο τῆς *Συεῖν*, ob fragrantiam. *Plinio*, 1. 19. c. 8. (p. 505.) Thymbra, quæ cunila, quæ & satureia dicta, in condimentario genere.” *B. P.* “ *Columella* tamen distinguit thymbra a satureia. Et satureia thymi referens thymbraque saporem. *R. H.* “ Satureia, quasi saporeia, a sapore.” *H. Ox.*—The satureia montana. *B. P.* 218. Calamintha frutescens, satureiæ folio, facie & odore. *T.* 194. Melissa, foliis linearibus, integerrimis. *H. Cliff.* 308. Winter savoury is the thymbra. *Dod.* 282. and may be used for the summer savoury, as they are indifferently in the kitchens. But that they are thymbrae *Dioscoridis* does not well appear.

“ Thymbra nota est, quippe quæ gignitur in tenui solo, asperisque locis, thymo similis, at minor tamen, & tenerior, spicam ferens florum plenam, virentem. Eadem potest quæ thymum, si modo simili assumatur, atque itidem sanorum usus apta est. Est & fativa quædam satureia (*σπαρτη θυμλεα*) sylvestri ad omnia inefficacior: quæ tamen propter mitiorem acrimo-

“ niam commodius in cibos recipitur.” *Dioscor.* l. 3. c. 45 (not 25, as in *B. P.*) totum. p. 191.

S E C T. II.

It is a warm attenuant, diaphoretic and carminative, hotter and more agreeable than hyssop; called pectoral, stomachic, uterine; and commended internally in female obstructions, flatulencies, indigestion, want of appetite, cough, asthma, &c. and externally as discutient and anodyne. “ Saporis ac odoris est acris ac calidi, unde & calida ac sicca censetur gr. 3. attenuat, aperit, discutit. Usus in affectibus *ventriculi*, cruditate, anorexia, &c. *pectoris* asthmate, &c. *uteri*, mensibus obstructis, &c. visum acuit. Extrinsecus discutit tumores, doloresque aurium sedat. N. pulices necare dicitur strata in cubili. *Præp.* 1. Aqua ex herba florente. 2. Oleum stillat. cum aqua.” *Schrod.* 675. Antacida, acris, aromatica, alcalescens est in *Boerb. Lib. de M. M.*

It is of a hot biting aromatic sweetish taste, and fragrant sweet smell. “ Folia odore thymi vulgaris mitiore, sapore æque acri.” *J. B.* “ Odore suavi vehementi, sapore acri.” *R. H.* “ Saporis est acris & calidi; odoris grati & specifici.” *Nucl. Belg.* 259. It is one of the most common kitchen sweet herbs, both on account of its flavour, and of its effect in correcting the windiness of pease, beans, cabbage, &c. “ Usus ejus frequens est in culina; inter alia olera cum phaseolis & aliis utiliter incoquitur & editur. Fabis cum felino incisa & infrixa edulium gratum, Belgis frequens, habetur. *Lob.* Pauperes in Germania brassicas capitatas hac herba condiunt, qui fit ut illæ jucundissimum odorem, ac saporem gratissimum inde accipiant. *J. B.* “ Est inter herbas calidas & acres, quæ urinam & menses movent. Facultatibus cum thymo & serpillio convenire aiunt. Nobis potius, ut facie, sic viribus ad hyssopum accedere videtur.” *R. H.*

S C A B I O S A.

S E C T. I.

1. Scabiosa. *offic.* Scabiosa pratensis, hirsuta, quæ officinarum. *B. P.* 269. *T.* 464. Scabiosa vulgaris, major. *Dod.* 122. Scabiosa major, vulgaris. *Ger.* 719. Scabiosa major, communior, hirsuta, folio laciniato. *J. B.* iii. 2. *R. H.* 374. *Syn.* 191. *H. Ox.* iii. 45. Scabiosa vulgaris, pratensis. *Park.* 484. Scabiosa corollis radiatis, corollulis quadrifidis, caule hispido. *H. Cliff.* 31. Common Field-Scabious.

2. Succisa, Morsus Diaboli. *offic.* Succisa glabra. *B. P.* 269: Succisa, sive Morsus Diaboli. *Dod.* 124. *J. B.* iii. 11. *R. H.* 380. Morsus Diaboli. *Ger.* 726. Morsus Diaboli vulgaris, flore purpureo. *Park.* 491. Pyncocomon Dioscoridis. *Col. Phyt.* 35. Scabiosa pratensis, nostras, præmorsa radice. *H. Ox.* iii. 45. Scabiosa, integrifolia, glabra; radice præmorsa. *H. L.* 538. Scabiosa, folio integro, glabro; flore cæruleo. *T.* 466. Scabiosa radice succisæ, flore globoso.

R. Syn. 191. Scabiosa corollulis quadrifidis, caule simplici, ramis approximatis, foliis lanceolato-ovatis. *H. Cliff.* 30. Common Devil's-bit. They grow in fields, meadows, &c. The first flowers in (June or) July; the other in August. The root, leaves, and flowers of both are used. "Officin. scabiosæ radix, (colligenda vere) folia, flores. Succisæ radix, flores, nonnunquam folia." *Schrod.* 676. & 688. "Utriusque herba." *Ph. Lond. vet.* "Folia." *Mill. Bot.* "Succisæ herba, radix: scabiosæ herba." *Ph. Edinb.* "Ufu scabiosæ folia: succisæ folia, flores & radix." *Dale.*"

"Scabiosa, aliis a scabro herbæ habetur aliis quod scabiei medeatur, quod vox (Ψωρα) p̄sora prætendere videatur: quare Ψερα Aërii aliqui censent: sunt qui ad stœben Dioscoridis, l. 4. c. 12. referant. Succisa dicitur, quod ejus radices circumrosæ sint: vulgus enim credit, dæmonem cum tantæ efficacis radicem hominibus invidet, eam statim ubi succreverit, undique circumrodere: quare morsus diaboli dicitur. Sunt qui geum veterum censent: aliis videtur nigina Plinii, l. 27. c. 12." *B. P.* Dioscorides does not describe the stœbe; but his description and virtues of the pycnocomon by no means agree with the succisa.

S E C T. II.

They are attenuant, deterfive, diaphoretic and subastringent vulneraries; called pectoral and alexipharmic; and are commended internally in coughs, asthmas, malignant fevers, lues venerea, epilepsy, &c. and externally in the scurvy, itch, scabies, tetters, &c. and may be used in substance, infusion, decoction, or any manner of way.

"Scabiosa calfacit & siccatur usque ad 2. abstergit, attenuat, discutit, sudorifera, alexipharmaca, ac pulmonica est. Usus præcip. in apostematibus, pleurisi, angina, tussi, asthmate, peste, fistulosis seu manantibus ulceribus (mammarum, crurum, &c.) Extrinsecus in scabie, pruritu, impetigine, ac præcipue in achoribus, tinea, furfuribus ac lendibus capitis; in sugillatis maculis faciei, dolore hæmorrhoidum (in suffitu vaporoso.) N. radix scabiosæ majoris flore purpureo, specificè curare dicitur luem veneream, adeo ut falsæparillæ vel parum vel nihil cedere censeatur. *Præp.* 1. Aqua stillat. ex integra planta cum radice ac floribus. 2. Syrupus, ex succo. 3. Conserve, ex floribus. 4. Sal, ex planta incinerata." *Schrod.* 676. Emolliens suboleosa leniens, aperiens deterfiva ad ulcus pulmonum nephritica, scorbutica lenior, roborans antirachitica, est in *Boerb. Lib. de M. M.*

"Succisa calfacit & siccatur 2. amara, alexipharmaca, ac vulneraria est, ut scabiosa, cum qua & reliquis facultatibus convenit. Imprimis celebratur in epilepsia, peste uteri dolore, sanguine coagulato, abscessibus occultis, lue venerea, ejusque ulceribus, in vulneribus recentibus, &c. Extrinsecus in angina, tumoribus tonsillarum diuturnioribus qui ad suppurationem ægro proveniunt (gargarism.) in sugillationibus, bubonibus, &c. *Præpar.* aqua stillat. ex integra planta (cum radice & floribus) collecta in fine Julii." *Schrod.* 689.

1. They are of an herbaceous, somewhat bitter taste, and subacid, affecting the lips; and of a faint smell. "Scabiosæ folia sunt sapore subacri; succisæ
"cissæ

“*cisæ radix, sapore misto, acri & amaro.*” *J. B. R. H.* “*Scabiosa saporis est subamari.*” *N. Belg.* 260. “The scabious is bitter, and reddens a little the blue paper; which makes it probable that it contains a salt very like sal ammoniac, united to a great deal of fetid oil, and of earth: for by a chymical analysis, besides several acid liquors, much oil (*soufre*) and earth, a little of an urinous spirit and of volatile salt are got from it. It is alexiterial, sudorific, aperitive, deterfive, vulnerary, and promotes expectoration. The juice is given from ʒij. to ʒvi. ” *T. Hist.* p. 140. “The leaves of *succisæ* are bitter, and redden (*assez*) the blue paper; the root, which is bitter and styptic, reddens it more. The same virtues are attributed to it as to scabious.” *T. Hist.* p. 142.—2. *Scabiosæ foliorum thea* is not much tinctured; of an herbaceous, subacid, bitterish taste, and greenish smell: it reddens a little the sol. *heliotropii*, and with a solution of vitriol becomes of a dark semi-opake green colour, precipitating, though slowly, a bluish grey sediment. *Succisæ foliorum thea* is bitterer, turns a little blacker with vitriol, and precipitates faster. Spirit of vitriol clarifies this mixture more than it does the vitriolic mixture of the former. When both had stood fourteen days the scabious was little altered; but the *succisæ thea* was become sourish and stinking.—3. Many virtues are attributed to these plants, as if they were universal purifiers of the blood, not only from scorbutic and purulent taints, but also from pestilential and venereal infections. “*Nostri medici miris scabiosam extollunt laudibus, & recte quidem, autoritate nimirum versuum quorundam nixi, quos S. Urbanum composuisse ferunt; qui sic se habent:*

“*Urbanus pro se nescit pretium scabiosæ:*
 “*Nam purgat pectus, quod comprimit ægra senectus:*
 “*Lenit pulmonem: purgat laterum regionem;*
 “*Abscessus frangit, si locum bibita tangit.*
 “*Tribus uncta foris anthracem liberat horis.*” *J. B.*

—In the *Schola Salernitana* (cap. 31. p. 395.) we have it thus;

“*Urbanus per se nescit pretium scabiosæ,*
 “*Confortat pectus, quod deprimit ægra senectus;*
 “*Lenit pulmonem, tollit laterumque dolorem.*
 “*Vino potatur. Virus sic evacuatur.*”——

Brasavolus, in *examine simplicium* (Romæ 1536. in fol.) gives six verses of them, and somewhat different from the former. He says they were composed in the time of pope *Urban II.* who lived about 1099. and was the author of the Holy-War. Vide *Moreau's Animadv. in Schol. Salern.* p. 396. where several authors are mentioned who commend it much in the pestis. “*Credo in febribus pestilentibus succum (scabiosæ aut succisæ) in syr. cum theriaca, esse egregium sudorificum: bubones etiam pestilentes, si statim initio applicetur, discutere, ne ad suppurationem perveniant.*” *Hoffman.* p. 442. “In plurimis expertus est *D. Willebrochius (archiducis Ferdinandi M. celebr)* ad rhagades seu scissuras, & serpigines ex lue oriundas (etiam in illis in quibus decoctum ligni parum profuit) certissimum remedium, pu verem

“radicis scabiosæ, per hebdomades tres quotidie assumptum.” *R. H.* 374.
 “Dodonæi autoritate ego securus plerumque gargarismis, ubi venereis &
 “aliis ulceribus fauces gingivæque scatent, succisam felici successu miscere so-
 “leo. Succum ipsum Camerarius utiliter admodum addi gargarismis in angina
 “ait; (*Sim. Paulli.*)” *R. H.* 380. Both certainly are very safe; and may be
 given in powder, infusion, decoction, juice or syrup, *ad libitum*.

S C H O E N A N T H U S.

S E C T. I.

Schœnanthus, Juncus odoratus. Fœnum camelorum. *offic.* Juncus odora-
 tus, sive aromaticus. *B. P.* 11. Schœnanthum. *Ger.* 43. Juncus odoratus.
 tenuior. *Park.* 144. Schœnanthus, sive Juncus odoratus. *J. B.* ii. 515. *R. H.*
 1310. Gramen ad Juncum accedens aromaticum, majus, Syriacum. *H. Ox.*
 iii. 229. Gramen dactylum, aromaticum, multiplici panicula, spicis brevibus,
 tomento candicantibus, ex eodem pediculo binis. *Plut. Phyt.* 190. Palea de
 Mecha & Pastus Camelorum vulgò. *B. P.* Sweet-smelling Rush; or Camel's
 Hay. Ischæmum. *Lin. G. P.* 1018. p. 525.

It grows in Arabia, Africa, &c. There is no other grass, they say, in the
 deserts between Syria and Egypt but this, which camels eat. It is brought
 from the Levant, or by the East-Indies. “It comes to Paris from Mar-
 “seilles, and is taxed as a Levant drug.” *Savary's Dict.* II. All the plant is
 medicinal; but we seldom get more than the leaves, with part of the stalk.
 “The flowers are seldom brought to us; and, when they are brought, they
 “are found of little quickness in taste, or sweetness in smell; and it seemeth
 “probable that because these small rushes, which are now usually in the shops;
 “are found to be more quick and hot in taste than either stalks, flowers, or
 “roots, that are brought us, these are and have been received into more use,
 “and the other flowers are left off, or quite neglected to be used; which
 “hath caused the merchants likewise not to ask for them to bring them.”
Park. 145. “Schœnum ex Arabia petitum, ad hæc, idem auctor (Andro-
 “machus) imponere præcipit, nescio qua de causa schœnanthum a vulgaribus
 “appellatum: nobis siquidem cum florum copia non adsit, juncum utimur ex
 “Arabia comportato, cujus summitatem cameli sæpenumero abroserunt, ju-
 “cundissime namque hunc juncum cameli pascuntur, secus vias ibi plurimum
 “nascentem. Est autem juncus iste exigui pretii medicina, solaque odoris
 “integritate dijudicanda: quoniam celeriter ipsius odor expirat.” *Galen de*
Antidotis. l. i. c. 14. p. 106. F. “Mirum est quod asserit Galenus, Junci
 “odorati florem non vidisse, nec suo tempore afferri; (where says he so?)
 “cum tamen Dioscorides inter electionis conditiones, hunc Juncum floridum
 “expostulet. Hodie vero culmi cum floribus sæpe afferuntur.” *Geoff.* ii.
 262.

“Juncus odoratus (*σχενος*) alius in Africa, alius in Arabia nascitur:
 “rursumque alius in ea parte Arabiæ quæ Nabatæa dicitur: & hic quidem
 “omnium est laudatissimus. Secundum locum sibi vindicat Arabicus, quem
 “nonnulli Babylonium, alii Teuchilin cognominant. Afer vero inutilis cen-
 “setur.”

“setur. Deligito recentem, summe ruffum, flore copioso (πολυανθή): quique
 “dum scinditur finditurve purpurescat, tenuem, quique dum manibus con-
 “fricatur, suavem rosæ odorem emittat, multoque cum fervore linguam mor-
 “deat. Usus est floris, culmorum, & radicis. Vim habet urinas mensesque
 “ciendi, &c.” *Dioscor.* l. 1. c. 16. p. 15. *Does this agree with our Schoenanthus?*”

“Juncus odoratus sive aromaticus. Σχοινος ἡδυσσμος, καὶ εὐσμος, καὶ εὐω-
 “δης. *Hippoc.* ἀρωματικός, καὶ μυρεψικός, græcis posterioribus. Σχοινος, *Dios-*
 “*coridi* & *Galeno*. Juncus odoratus, *Plinio*. Juncus rotundus, *Celso*. Squi-
 “nanthum, *Varroni*. Adhar & adhir, *Arabibus*. Sachbar. *Arabiae incolis*.”
B. P. 11.—I find also in Hippocrates σχοινὺς ἀνθος. (*de Murb. Mul.* l. 2. p. 665.
 l. 12.) “Eum qui hodie in officinis est legitimum esse, credam Matthiolo-
 “tum, cum odorem rosæ mihi exhibuerit, quem Dioscorides desiderat.
 “Multo firmitus cum facultates a Galeno (8 Simpl.) illi tributas representarit.”
Hoffman. p. 444. Vide *Galen.* Simpl. l. 8. p. 61.

S E C T. II.

It is a warm stimulating aromatic, or an attenuating diaphoretic and carminative; called cephalic, stomachic, uterine, and alexipharmic; and is recommended in the hickup, vomiting, flatulent colics, female obstructions, &c. but little used except in the mithridatium and theriaca. It may be given in substance to ʒi. in infusion to ʒij.

“*Offic.* Culmi seu surculi (stramen) flores, radix. *Vires.* Calfacit, sub-
 “astringit, tenuium est partium, discutit. *Usus præcip.* in obstructis men-
 “sibus, epate, liene, in ventriculi inflatione, vomitu ac singultu, in urinæ
 “difficultate, renum, vesicæ, ac uteri dolore. Extrinsecus corrigit fœtorem
 “oris, roborat caput (lotione), discutit uvulæ tumorem, roborat ventriculum.”
Schrod. 677.—1. I observe, that it is of a hot, biting, agreeably aromatic,
 and somewhat bitterish taste, and sweet smell. “Of a quick and spicy taste,
 “somewhat pleasant; and of a fine sweet, gentle or soft scent.” *Park.* 144.
 “Ubi recens est hæc planta, manibus confricata jucundi est odoris, & saporis
 “non ingrati, licet videatur aliqua adesse amaritudo, cum acrimonia luculen-
 “ter linguam mordicante; quæ tamen solet efficacior esse, in quibusdam foliis
 “remissis gramineis valde tenuibus & carinatis.” *J. B. R. H.* “Saporis
 “calidi & subamari, odoris aromatici.” *Nucl. Belg.* 262. It scarcely is ob-
 servably bitter.—2. It keeps good many years, at least without losing its aroma.
 “Floribus recentibus aromatica tenuitas inest, quæ exacto anno perit, ita ut
 “post duos annos penitus inutiles sint. . . . Oleo essentiali aromatico copioso
 “turget, quod distillatione extrahitur; sed rarioris est usus in officinis.” *Geoff.*
 ii. 263. Did he ever see the oleum essentielle? He steals all the virtues from
 Schroder without owning it.

“Memini Henr. Meibomium, ceu specificum ad vesicæ ulcera, Schoenanthum herbam & cyperi radices adhibere; a quorum usu tophus nucis juglandis fere magnitudine, ex honestissimæ matronæ naturalibus locis, per urinas
 “fuit excretus, qui diu satis ægram ulcere vesicæ vicinarumque partium con-
 “sectam, lecto affixerat.” (è *Sim. Paulli.*) *R. H.* 1311.

S C R O -

SCROPHULARIA. *Vide* Roots.

S E N A.

S E C T. I.

Senna, Senna Alexandrina, Folia orientalia. *offic.* Senna Alexandrina, five foliis acutis. *B. P.* 397. *T.* 618. *H. Ox.* 201. Sena Alexandrina, &c. *B. P. R. H.* 1742. Sena. *Dod.* 361. *Lob.* 350. *J. B.* 1, 2, 377. Sena orientalis. *Tab. Ic.* 517. *Ger.* 1297. Sena Alexandrina. *Park.* 225. Cassia, foliolis trium quatuorve parium subovatis. *H. Cliff.* 159. Sena, or Alexandrian Sena.

It is a native only of hot climates, as of Arabia, &c. It is said also to be cultivated in Syria, Persia, &c. but is not mentioned among the Plantæ Ægypti by Alpinus. "Senne comes to Marseilles from Alexandria, Sayde (or Sidon) and Tripoli in Barbary; from 3 to 400 quintals annually of the Alexandrian, &c." *Savary Diet.* iii. 567. "Mr. Blondel, who was long Consul of the French nation in several sea-ports of the Levant, assures us, that the true Sene grows only in the woods of Ethiopia, and in Arabia about Moca; that formerly it was not to be purchased but at Cairo; and that what was brought from Seyde, Tripoli, &c. was carried thither from Cairo or Arabia by the caravans; or from Alexandria by sea." *Savary Diet.* ii. 1537. The leaves only are used; though the fruit or follicles amongst them are as good. "The best Senna comes from Alexandria, and ought to be of a pale yellowish-green colour, not broken, but free from stalks, and of a pleasant fresh scent." *Miller Bot.* 409. The small footstalks of the leaves need not be thrown away more than the pods.

"Aëtius is the first Greek writer, who has mentioned or described the milder sorts of purging medicines, such as Cassia, manna, senna, myrobalsans: the two last, he says, were brought from foreign parts to his country, *i. e.* from Syria to Egypt. Sena he describes as a fruit; by which, no doubt, he means the same thing as Serapion does by the vagina, and Mesue by the folliculus, which contains the seed: for neither these authors, nor Aëtius, mention any thing of the leaves. And though these are chiefly in use now, yet the pods are sometimes made use of too, and from what we can learn from these writers, were probably the only part of Sena, which was then administered in physic. He adds, that this simple is very effectual in purging off the phlegm, as well as the bile: the first quality is what the Arabian writers take no notice of. What he relates of its coming from Syria, as well as Egypt, agrees with the best accounts we have of the plant: that which is brought from the Levant being still esteemed the most valuable. As to these several sorts of purges he speaks of, he professedly takes them from the Arabians, who without dispute first introduced these simples into physic." *Freind Hist.* i. 271.

"Scena est folliculus plantæ Persis dictæ Abalzemer, Orobi modo nascentis. Sativa est & agrestis. Folliculo quam foliis est efficacior, præsertim si is ex viridi nigricat, modice amarus, subadstringit absolutus, recens, in quo semen amplum, compressum; vetustate enim exanimatur." *Mesue de Simpl.*

l. 2. c. 15. p. 65. b. "Serapio primus de Senna mentionem fecit, deinde "Mesue." *Geoff.* ii. 267. Mesue obiit circa annum 865. Serapio floruit circa an. 890. "Serapion is placed by Haly after Mesue. . . he refers to some "medicines made use of by Mesue, &c." *Freind. H.* ii. 41. But Mesue, cap. de Colocynthide. f. 53. a. mentions Serapionis filius twice. Actuarius floruit circa 1280. *Vid. Aſuar. Meth. Med.* l. 5. c. 8. p. 274. D. "Porro quod "Sene nominatur, & ipse fructus quidam est, qui inde (Syria & Aegypto) "adportatur drachmæ pondo assumptum, citra noxam purgat, pituitam ac "bilem educit." This is all Actuarius has of it there.

S E C T. II.

It is a stimulating and attenuating, safe and efficacious purging medicine; called a cholagogue and phlegmagogue; commended and much used both in chronic and acute diseases, for the robust adults, as well as for the delicate and young, pregnant women not excepted. It is more cathartic, but less astringent, than rhubarb.

"*Officin.* Folia, tum quoque folliculi, sed raro. *Vires.* Senna inter purgantia usitatissima est, adustos & serosos humores, & hinc flavam bilem, pituitamque ex capite, epate, liene, continuatoque usu juncturis sine noxa sat benigne educens. Excitat tamen nonnunquam tormina, id quod ex abundantia pituitæ vitreæ, seu mucilaginis acris evenire nonnulli volunt. Verum rectius sentire videntur, qui id crudiori, ac magis terrestri senæ particulæ, forti expressione prolecta, adscribunt. Quia autem calida ac sicca 1. corrigitur flor. violarum, borraginis, prun. & quo minus ventriculo obesse possit, additur cinnam. galang. zinzib. &c. Exhiberi potest omni ætate, & vel ipsis prægnantibus. Dosis in substantia a ʒß. ad ʒiß. in infuso a ʒiïß ad ʒß. *Præp.* 1. Pulvis Sennæ *Montag.* 2. Syrupus. 3. Syrupus de pomis. *Reg. Sab.* 4. Electuarium *Diabelzemer.* 5. Passulæ laxativæ. 6. Extractum. 7. Tinctura." *Schrod.* p. 774.

For 1. It is of a subviscid nauseous bitterish taste, and not disagreeable smell. "Folia sunt gustus nonnihil viscida & amari, non sine nausea aliqua." *J. B. R. H.* "Folia saporis glutinosi, leviter amaricantis, non sine nausea aliqua." *Geoff.* ii. 267. "It ought to be of a pleasant fresh scent." *Mill. Bot.* 409. "Of a somewhat grateful smell, and a subacid, bitterish, nauseous taste." *Lewis Pharm.* 64. "Saporis subacris, amaricantis, nauseosi quodammodo." *Boecler. in Herm. Cyn.* 535.—2. Foliorum thea is of a deep yellow colour, somewhat thickish and muddy, tasting as above.—3. It yields its virtues soon and easily to water, which it impregnates only to a certain degree. According to Mr. Geoffroy, *Mem. Acad.* 1738. pulv. fol. senæ ʒi. will yield extracti ʒi. with water. "Fol. sennæ ʒij. will impregnate aquæ ʒiv. as strongly, as "if twice the quantity were infused, because the water will bear no more of "the purgative parts of that body." *Vid. Grew's* experiments upon the solution of salts, read before the R. S. 18 Jan. 1677, annexed to his anatomy of plants. Hence perhaps the reason why infusions commonly are reckoned much weaker than the substance, and the dose doubled in them (*vid. rhubarbarum*) viz. because a sufficient quantity of the menstruum is not taken. But that aqua ʒiv. will extract all the cathartic virtue of sennæ ʒij, I cannot say:

there is reaſon to believe it will not. Here the ſena is to the water as 1 to 16. but in piſana cathartica for ſennæ, glycyrr. & coriandri āā ʒi. aquæ ʒvj. vel viij. are ordered in *Pharm. Bateana*; and yet the author ſays, “Mirum eſt quam delicatule operabitur. Quinquies aut ſexies movere raro fallit.” And I always think ſennæ ʒi. enough for aquæ ʒiv. and not too little for aquæ ʒviij, for perſons of age.—4. It ſeldom operates downwards under two; ſometimes four hours and more after it is taken; and commonly with troubleſome gripings of the guts. Theſe gripes ſome attribute to one cauſe, ſome to another. Vid. *ſekrod.* “Torſionibus ſæpe moleſtat, non quod flatulenta ſit, ſed quod firmiter hærentes humores, ac plerumque acres, nequeunt ſine ſenſu doloris evelli.” *Geoff.* ii. 269. Though its flatulency is more eaſily deducible from his analyſis, than its duo ſalium genera, ammoniacale unum, & tartareum alterum; though the uneaſineſſes it cauſes are very like flatulent gripes, and go off the ſame way; and though every other cathartic does not occaſion ſuch torſiones; yet certainly they are owing to its irritation, and the conſequent ſpaſmodic contractions in the guts; but not to the pulling or tugging away by force the firmly adhering humours. However, whatever is the cauſe of theſe tormina, they are always ſafe, and their effects ſalutary; as contributing conſiderably to the action of the medicine on the viſcera, yea on all the body, as deobſtruent, as well as cathartic, for they ſometimes put all the body into a ſweat. Theſe gripes attack only about the beginning, or during the height of the operation, and ceaſe after it: ſo that they no ways reſemble the borborigmi occaſioned by the purging ſalts.—5. “Analyſi chymica foliorum ſennæ ʒlxxvij. (or lbiv. ʒiv.) exhibuerunt liquoris alcalini urinoſi ʒxv, acidi vero humoris ʒix. circiter, qui quidem promiſcui prodierunt ex retorta, olei craſſioris ʒvi. ʒj. gr. xij, ſalis volatilis urinoſi ʒj, carbonis ʒxvij. ʒviijß. Unde cinerum ʒivß. ac inde ſalis fixi mere alcali ʒj. gr. lvj,” ſecundum *Geoff.* ii. 268. Hence there remained of earth ʒiij. ʒiij. gr. xvi. and the ſum of the products being ʒxlx. ʒj. gr. xlviij, it wants of ſixty-eight ounces. ʒxvij. ʒvi. gr. xxiv. which ſeems to be too large a loſs. But if ſo much was really diſſipated, or nothing but air, there is no wonder that it be flatulent. “Ex hac analyſi liquet ſennam conſtare ex duobus ſalium generibus, ammoniacali uno, & tartareo altero; oleo craſſiori copioſo ſimul junctis; unde compoſitum exurgit, gummoſo-reſinoſum, a quo purgandi facultas pendet. Ex ſenna enim ope aquæ extractum educitur, quod acrimonia forti pollet, & exſiccatum facile accenditur.” *Geoff.* l. c. “Revera cum ſennæ viſ purgatrix a ſubſtantia gummea & reſinoſa pendeat, quæ duplici modo actionem ſuam exerit, tum humores ſpiſſos ac lentos ſolvendo, tum etiam & præcipue nerveas inteſtinorum fibras irritando & ad contractionem ſolicitando, quo minus hæc reſina extenditur, eo magis partibus adhæret, eaſque vividius lancinat & irritat: quo magis extenditur, eo minor eſt ejus adhærentia, eo minor irritatio. &c.” *Ibid.* p. 269. So that, according to him, the partes reſinoſa & gummoſa, though both amicably diſſolve in water, ſeparate in the guts, &c. But this is of a piece with his other reaſonings: he aſſumes what cannot be granted, and draws conſcluſions which will not follow.

Some make it purge one humour, ſome another, others every humour. “Blandum, polychreſtum & catholicum purgans eſt, humores quoſvis mo-

“vens, & per alvum blande educens. . . In gummositate autem potior vis
“consistere videtur.” *Herman. Cyn.* p. 534.

S E C T. III.

It may be given in substance to ʒij, in infusion to ʒß. But the infusion ʒj, in aquæ (vel vini) ʒvij, will purge almost any person tolerably well. Fixed salts rather weaken than correct it, and alter its nature much; the carminative seeds, nutmeg, or the like aromatics, do better; acids, as tartar, prunes, &c. also betonica aquatica, and tea, improve its taste, and manna its operation. It is an ingredient in electuarium lenitivum, tinctura cephalica purgans, elixir salutis, decoctum tamarindorum, infusum amarum cum senna, infusum sennæ, syrupus de senna & rheo, pulvis diasenna, & pilulæ stomachicæ.

“Observandum est sennam valde nocere iis morbis in quibus humores æstu-
“ant, & solidæ partes inflammantur. Ab ea igitur abstinendum in hæmor-
“rhagiis, inflammationibus quibuscunque, & in morbis pectoris. His dem-
“ptis, nullum fere est morbi genus, ubi, servatis artis legibus, convenire
“non possit.” *Geoff.* ii. 270. A needless caution! for in all these I have
known it do service. “In ipsis etiam febribus continuis, & ardentibus, teste
“Wedelio, usurpari potest.” *Boecler. in Cyn. Herm.* p. 535.

S E R P Y L L U M.

S E C T. I.

Serpyllum. offic. Serpillum vulgare, minus. *B. P.* 220. *Park.* 8. *T.* 197. Serpillum vulgare. *Dod.* 277. *Ger.* 570. *J. B.* iii. 269. *R. H.* 521. *Syn.* 230. *H. Ox.* iii. 403. Serpillum. *Cæs.* 465. *Lob.* 230. Serpillum minus, flore purpureo. *Tab. Ic.* 362. (Serpillum scribit etiam *Ger.* & *Park.* ut & *T.* & *B.* *J.* ac forte rectius.) Thymus repens, foliis planis, floribus verticillato-spicatis. *H. Cliff.* p. 306. Common Wild-Thyme, or Mother-of-Thyme.

It grows in all our hilly and dry pastures and heaths, flowering all the summer over. The herb is used. This is the most usual species. But the New London Pharm. has thrown it out; and taken in its place the Serpyllum, foliis citri odore. *B. P.* 220. *T.* 197. Serpillum citratum. *Ger.* 573. *Park.* 6. *R. H.* 522. *Syn.* 231. Lemon-Thyme; by the name of Thymi citratifolia. Why is it called Thymus? Where and how is it used? Why the folia only? Is it specifically different from the common?

“Serpyllum a serpendo putant dictum: quod in sylvestri evenit, in petris
“maxime. Sativum non serpit, & ad palmi altitudinem increscit. Pinguius
“voluntarium, & candidioribus foliis ramisque, adversus serpentes efficax.”
Plin. l. 20. c. 22. p. 536. l. 43, with whom it is once serpillum, (but commonly serpyllum) viz. l. 14. c. 10. p. 350. l. 46. In the common editions of Virgil it is serpyllum; but a late learned critic corrects it serpullum. In Greek it is ἐρπυλλεν, ab ἐρπω, serpo.—But this seems not to be the plant the ancients called so. Vid. *Bod. in Theoph.* p. 692. ad 695.

“Serpyllum

“ Serpyllum (ἐρπυλλος) est quoddam hortense, quod quidem odore samp-
 “ suchum imitatur, & in coronas addi solet: ita dictum a serpendo, quod
 “ radiciter quacunq̃ue sui parte terram attingat. Habet autem folia & ramu-
 “ los origani, verum caloris candidioris, & è maceriis demissum, longius,
 “ latiusq̃ue propagatur. Alterum sylvestre, quod etiam Zygis appellatur,
 “ minime serpit, at in altum assurgens ramulos edit tenues & surculosos, fo-
 “ liis rutæ similibus refertos, verum utcunq̃ue angustis, longioribus atq̃ue
 “ durioribus. Flores gustanti acres, jucundi odoris: radix nullius usus.
 “ Nascitur in petris efficacius, magisq̃ue excalfaciens, & ad medendi usum
 “ aptius quam sit hortense.” *Dioscor.* l. 3. c. 46. p. 191.

S E C T. II.

It is a stimulating aromatic; called cephalic, stomachic and uterine; and is recommended for female obstructions, green-sickness, vapours, &c. But it is little used, except in baths and fomentations.

“ Calfacit & siccatur in princip. 3. Saporis acris; attenuat, aperit, cepha-
 “ lica, uterina, ac stomachica est; usus præcipue in mensibus & urina cienda
 “ (balneo), in expuitione sanguinis, spasmo, &c. Extrinsecus arcit vigilias,
 “ cephalalgias, vertiginem. Ciet menses (balneo). *Præpar.* Aqua stillat. ex
 “ planta cum floribus Junio collecta.” *Schrod.* 682. from the antients chiefly.
 Antacidum, acre aromaticum, & uterinum, est in *Boer. Lib. de M. M.*

For 1. It is of an acrid, aromatic, bitterish taste, and fragrant smell. “ Folia
 “ sapore acri & aromatico.” *J. B.* “ Odoris est grati, saporis calidi & acris.”
Nucl. Belg. 272. “ It is a little bitter, acrid, styptic, odoriferous, and red-
 “ dens (assez) pretty much the blue paper. It seems to abound with a sal
 “ volatile oleosum aromaticum, not quite freed of the acid . . . so is cephalic,
 “ stomachic, and good for the vapours. It destroys that explosive matter
 “ which causes convulsive motions.” *T. H. pl.* p. 149.—2. It is also com-
 mended for old coughs, vertigoes, lethargies, epilepsies, &c. According to
T. l. c. it replenishes the blood with spirituous parts; it restores the functions
 of the primæ viæ; it removes obstructions; and what not. “ Boiled in wine
 “ and drank, it is good against wambling and gripings of the belly, ruptures,
 “ convulsions, and inflammations of the liver.” *Ger.* 572. e *Dioscor.* “ Lo-
 “ quelam apoplectico postliminio restitutam; spiritu serpylli vidimus *D. Soame*
 “ e *Dolæo.*” *R. H.* “ The distilled oil is good for the tooth-ach.” *Miller Bot.*
 411.

S O L D A N E L L A.

S E C T. I.

Soldanella, *Brassica maritima. offic.* Soldanella maritima minor. *B. P.* 295.
 Soldanella. *Dod.* 395. Soldanella marina. *Ger.* 838. *R. H.* 726. Soldanella
 (vulgaris. *Park.* 168. five) volubilis marina. *Park.* 167. *Brassica marina, five*
 Soldanella. *J. B.* ii. 166. *Convolvulus maritimus, nostras, rotundifolius.*
H. Ox. ii. 11. *T.* 83. *Convolvulus maritimus, Soldanella dictus. R. Syn.* 276.

Convolvulus foliis reniformibus. *H. Cliff.* 67. Sea-Bindweed, Sea-Withwinde, Sea-bells, Sea-coale, Sea-folefoot, Scottish Scurvy-grass. *Ger.* Sea cabbage. *Miller Bot.* 92. because perhaps Mr. Ray says it is improperly by some called Sea-colewort.

"It grows upon the sea-beach, in many parts of the North of England; and flowers in June." *Miller Bot.* Also in Holland, France, Italy. The herb is used, but very seldom. "*Offic. Herba, seu folia.*" *Schrod.* 775. "*Folia.*" *Ph. Edinb.* "*Herba.*" *Dale* 183. Soldanella is said to be of Arabic original. It is generally believed to be the *κραυχη θαλασσια* *Dioscoridis*.

"*Quæ brassica marina (θαλασσια κραυχη) dicitur, a sativa prorsum diffidet: quippe quæ folia ferat multa ac tenuia, aristolochiæ rotundæ similia. Horum vero singula a ramulis rubentibus exeunt, singulari velut hedera, pediculo. Porro albo prædita est succo, sed minime copioso. Gustu autem est utcumque salso, & quadantenus amaro; pingui vero compage. Totâ porro herba stomacho inimica & acris est, alvumque vehementissime solvit, si cocta edatur. Sed propter acrimoniam, nonnulli pingues carnes una cum ipsa concoquunt.*" *Dioscorid.* l. 2. c. 148. p. 138.

S E C T. II.

It is a violent cathartic; called a hydragogue; and commended in the dropsy, scurvy, and rheumatic cases; but it is reckoned hurtful to the stomach, and the dose uncertain: therefore it is little used any where, and never here.

"*Calfacit & siccat 3. Aquam valide educit, adeoque confert in hydrope, scorbuto, &c. corrigitur cum stomachicis, zinzibere, mace, cinnamomo, sem. anisi, &c. Dosis in substantia a ʒß. ad ʒj. Prepar. Succus inspissatus.*" *Schrod.* 775. Acre aromaticum est in *Boer. Lib. de M. M.*

1. It is of a saltish and bitterish taste, and without smell. "*Gustu est salso subamaro.*" *J. B.* "*Saporis est amari, salini & acris.*" *Nucl. Belg.* 275.—
2. It is a species of the *Convolvulus*, containing a proper milky juice, in which its virtues are lodged; and as it cannot be easily (if at all) determined, what proportion this juice bears to its other principles; neither what is its strength, if collected by itself (while, according to circumstances, it may contain more or less of it) so the dose must be uncertain. Hence we find that some make the dose in substance, or powder, ʒj. others ʒij. others ʒiv. In decoction some give it ʒß. others to ʒj. *Vid. Hoffman.* p. 74. *Nucl. Belg. R. H.* Hence also some commend it in the dropsy, as Fallopius, Massaria, Helidæus; others say even there it is hurtful, as Dod. *Lob. Adv. Attomarus.* And at its best it cannot be so good as, at least better than, jalap or scammony. "The whole herb is in use, and, as it is excellently calculated for discharging water, it contributes very much to the cure of dropsies and scurvies." *James Disp.* 260. This is his own.

S T O E C H A S.

S E C T. I.

Stœchas, Stœchas Arabica. *Offic.* Stœchas purpurea. *B. P.* 216. *T.* 201. Stœchas. *Dod.* 275. *Lob.* 234. Stœchas Arabica vulgo dicta. *J. B.* iii. 177. *R. H.* 514. Stœchas brevioribus ligulis. *Clus. H.* 344. *H. Ox.* iii. 353. Stœchas, sive Spica hortulana. *Ger.* 585. Stœchas vulgaris. *Park.* 67. Spica Italica. *Cæs.* 459. Lavendula foliis lanceolato-linearibus, spica comosa. *H. Cliff.* 303. French-Lavender.

It grows in plenty about Montpellier; also in Spain, Italy, &c. as well as in the Insulæ Stœchades, now called the *Îles d'Yeres* or *Hieres*, on the coast of *Provence*, whence it is named. In our gardens it flowers in June. The flower-spikes are used. "This beautiful shrub is planted with us in gardens, where it is easily increased, and bears our severest winters with moderate shelter; and pity it is that it is not more propagated, the fresh heads being certainly of greater virtue and efficacy than those which come from abroad, there being not fresh importations in many years." *Miller Bot.* 425.

"Stœchas (στίχας) in insulis Galliæ gignitur, quæ e regione Massiliæ sitæ stœchadas appellantur (καλεσμεναις στιχασιν) & ab iis quoque nomen accipit. Herba est tenuibus turculis, coma thymi, sed folio longiore, gustu acris, & aliquantum subamara; decoctum ejus, sicuti hyssopus, ad pectoris vitia efficax est. Antidotis quoque utiliter immiscetur." *Diosc.* l. 3. c. 31. p. 186. "Stœchas in insulis tantum ejusdem nominis gignitur, odorata herba, coma hyssopi, amara gustu. Menses ciet potu: pectoris dolores levat antidotis quoque miscetur." *Plin.* l. 27. c. 12. p. 680. "Sunt qui rectius stachyn, quasi spicam dici existimant." *B. P.* *Cordus* and others write it stichas.

S E C T. II.

It is a stimulating aromatic and subastringent, or attenuating diaphoretic, agreeing much with lavender in virtues; called alexipharmac and cephalic; and commended chiefly in diseases of the head and nerves. It is an ingredient in the mithridate & theriaca.

"Calfacit & siccit 2. abstergit, attenuat. *Usus præcip.* in affectibus capitis & nervorum, scil. in vertigine, apoplexia, paralyfi. In morbis pectoris itidem idem præstat quod hyssopus: insuper urinam & menses ciet. Venenis resistit, affectibus hypochondriacis succurrit: extrinsecus, in lotionibus capitis, suffitu, &c. *Præpar.* Syrupus de stœchade simplex. 2. Syr. de stœch. compos. 3. Syr. de S. Fernellii." *Schrod.* 688. Stimulans aromaticum est in *Boer. Lib. de M. M.*

1. It is of a subacid, aromatic, bitterish taste, and somewhat strong scented. "Folia odore & sapore aromatico." *J. B. R. H.* "Spicæ saporis sunt subamari & calidi, odoris grati fere instar lavendulæ." *Nucl. Belg.* 279.—
2. Summitatum thea is of a bitterish and camphorate-aromatic taste, and not disagreeable smell. It dilutes only syrup of violets, and reddens a little solution of heliotropii.

heliotropii. Solution of vitriol gives it a bluish-black colour; and precipitates a bluish-gray sediment, leaving it transparent, and of a fine sea-green above. —3. It much resembles lavender, and may well be reckoned a species of it. —4. Mesue has the *stœchas Arabica* (which seems to be the same with ours) among the purgatives; says it purges atra bilis and pituita; and commends it for the vertigo, epilepsy, melancholy, arthritic pains, quartans, &c. but adds, “Calidis, ficcis, biliosis, præsertim quibus multa bilis flava in ventriculo re-
“dundat, est noxia, quia turbat ventriculum, & sitim, vomitum, ardorem
“molestum, excitat.” He owns it is a weak cathartic, and wants a stimulus; and concludes, “Potatur ejus decoctum ab ʒv. ad ʒviij, pulvis autem a ʒiij.
“ad ʒv.” Thus *Mesue de Simpl.* c. 13. fol. 38. a.

TANACETUM.

S E C T. I.

Tanacetum, Athanasia, Tanasia, *Off.* Tanacetum vulgare, luteum. *B. P.* 132. *T.* 461. *H. Ox.* iii. 2. Tanacetum. *Dod.* 36. *Ger.* 650. *R. H.* 365. *Syn.* 188. Tanacetum vulgare, flore luteo. *J. B.* iii. 131. Tanacetum vulgare. *Park.* 80. *Par.* 482. Artemisia Diolcoridis. *Tab. Ic.* 10. Athanasia, feu Tanacetum. *Lugd.* 955. Tanacetum foliis pinnatis, planis, pinnis ferratis. *Fl. Lap.* 234. Tanacetum foliis pinnatis, pinnis pinnatifidis, incisis, ferratis. *H. Cliff.* 398. Common-Tansy.

It grows in hilly places, in the borders of fields, and by way-sides, flowering in July. The leaves, flowers, and seeds are used. “*Officin.* Herba cum
“floribus, semen.” *Schrod.* 691. “*Ufu Folia.*” *Dale* 98. & *Ph. Lond. Nov.*
“Folia, flores, semen.” *Ph. Edinb.*

“Tanacetum, forte a Tannaco, quo nomine Parthenium appellatum fuisse.
“*Plin.* l. 21. c. 30. testatur: Parthenion microphyllon forte *Hippocratis*,
“Hermolao. Ἀρτεμισία λεπτοφύλλος *Dioscor.* l. 3. c. 128. quibusdam vide-
“tur, nobis non item.” *B. P.* It is Tannacum, not Tannacum in *Pliny*.—
Tanacetum forte ab Athanasia.

S E C T. II.

It is a stimulating and deterfive diuretic and deobstruent; called carminative and uterine; and commended for flatulent and nephritic colics, dropsy, ague, worms, mensibus obstructis, &c.

“Calfacit & siccat, incidit, discutit; vulnerarium, uterinum, & nephriti-
“cum est. Usus præcip. in lumbricis, torminibus ventris, calculo, impuri-
“tateque renum ac vesicæ, mensibus obstructis, flatibus, hydrope, &c.
“Extrinfecus iisdem affectibus adhiberi potest, lavando, cataplassando, &c.
“Præp. 1. Aqua stillat. ex tota planta florente. 2. Oleum stillat. quod raro
“prostat.” *Scrod.* 690. Acre stimulant aromaticum, & uterinum est, in
Boer. Lib. de M. M.

1. It is of an acrid, aromatic, bitterish taste, and strongly fragrant smell. "Folia odore vehemente, sapore amaro. *J.B. R.H.* "Odoris est aromatici fortis, saporis valde amari & calidi. Est aperitivum, stomachicum, carminativum, specificum anthelminticum, emmenagogum, diureticum, febrifugum, vulnerarium, detergens, & resolvens: potissimum utimur ejus floribus & feminibus." *Nucl. Belg.* 285. "Tansy is acrid, aromatic, bitter, and does not redden the blue paper; the roots are insipid at first, then astringent, but not bitter. This plant contains a sal. vol. ol. aromaticum, loaded with much sulphur; for by a chymical analysis it gives much oil, a considerable quantity of earth (*assez de terre*) a little urinous spirit, no volatile salt; so is stomachic, febrifuge, sudorific, vulnerary, deobstruent." *T. Hist.* p. 366.—2. It is commended externally for scurf, tetters, and other diseases of the skin; and inwardly for rheumatic pains, cachexy, green-sickness, malignant fevers, vertigo, epilepsy, &c. "The leaves provoke urine and the catamenia: the good women give a syrup of the juice to prevent miscarriage." *Miller Bot.* 432. "Sunt e mulierculis, quæ ad abortum præcavendum, sæpe applicant partibus genitalibus tanacetum in manu calefactum." *Boecler. in Herm. Cynos.* p. 491. The Lapland women are wiser. "Fœminæ in Lapponia & Westrobothnia, ex hac planta conficiunt balnea vaporis, pro emolliendis adpropriatis membris instante partu, atque pro eodem facilius excludendo." *Fl. Lap.* 234. Tansy cakes are reckoned wholesome, and good to correct the flatulency of a Lent diet. "Miles Monspelienensis, hydrope pertinaci laborans, ad sanitatem restitutus erat solo decocto tanaceti." *Ephem. Germ.* an. 12. obs. 112. *R.H.* In a word it agrees much with *matricaria* & *abrotonum*.

S E C T. III.

It may, in conserve, juice, or infusion, be given to ounces; in powder to drachms. The flowers are in the *pulvis vermifugus*.

T H E A.

S E C T. I.

Thea, The. *offic.* Chaa herba in Japonia. *B.P.* 147. Chaa herba Japoniæ. *J. B.* iii. 2. 5. The Sinenfium, five Tfia Japonensibus. *Breyn. Cent.* p. 111. *R.H.* 1619. Euonymo affinis, arbor orientalis, nucifera, flore roseo. *Pluken Phyt.* 1. 88. *Alm.* 139. Thee Chinenfium, five Tschia Japonensium. *Hort. Amstel.* 346. Thea frutex folio cerasi; flore rosæ sylvestris; fructu unicocco, bicocco, & ut plurimum tricocco. *Kæmpf. Amæn. Exot.* p. 605. Thea Kæmpferi. *Gen. Pl.* 233. *H. Cliff.* 204. Thea, *offic.* Dale 321. The, Thee, or Tea-Plant.

It grows in China and Japan. The best description and figure of the plant, that I have seen, is in Kæmpfer. How it is cured, and the different sorts of it, see in *R.H.* and *Savary's D.Æ.* 2 col. 1755. It is generally believed that the

difference of teas is owing only to the soil, exposition, time of gathering, and manner of curing the leaves of the same tree; though some of late, I hear, assert that the plant which affords the green tea is not the same with that which affords the bohea tea. The leaves are used.

“ Mirum autem tantum (theæ fruticem) ad nos nondum pervenisse, cum
 “ jam a quadraginta & amplius annis, nempe anno 1687, hujus arbusculas
 “ sedecim ex Japonia, per Georgium Meisterum, miserit in hortum Promon-
 “ torii bonæ spei Andreas Clyerus, ut testatur Meisterus in tractatu, quem
 “ de itinere suo, & plantis in Japonia & Java majori visis conscripsit lingua
 “ Germanica, p. 227.” *Hort. Eltham.* p. 392. “ Semina septies, per aliquot
 “ annos, in hortum translata fuere, regerminarunt vero nulla: nec scio ulium
 “ hortum in quo creverit Europæum. Siquidem semina, teste Kæmpfero,
 “ ipso in loco natali, citissime ranciscant, cum maxime oleosa sint; adeoque
 “ vix singulum enascitur, longe itaque magis, dum bis meridiem subire debeant
 “ antequam in Europam perveniant: nec sperat Kæmpferus plantas vivas e
 “ Japonia per æstuosam Indiam deferri posse facile in Europam, quin tabe
 “ perirent sub itinere.” *Hort. Cliff.* p. 204.

How long Tea has been drunk in the East, and who first discovered it, I cannot find; but Kæmpfer relates the following Chinese fable concerning its invention: “ Darma, third son of Kosjuwo, king of India, a religious high-
 “ priest, and the twenty-eighth papa from Siaka (the author of that eastern
 “ paganism, ante Christum natum 1028 years) coming to China an. Dom.
 “ 519. to teach the knowledge of the Supreme Being, and the way to happi-
 “ nets, lived a most austere life, sub dio exigendo vitam, affigendo corpus,
 “ & affectus varie domando, satagebat sibi divinam conciliare gratiam, folio-
 “ rum victitabat esu, & in perpetuo satori (i. e. contemplatione) Summi Nu-
 “ minis, noctes ducebat pervigil & insomnis. After several years fasting,
 “ watching, &c. it happened, contrary to his vows, that Darma fell asleep.
 “ When he awaked, he was so enraged at himself, that, to prevent the like
 “ for the future, he cut off both his eyelids, and threw them on the ground.
 “ Postridie in locum supplicii reversus, videt ex singulis palpebris, admiranda
 “ transformatione, natam arbusculam, Theam viz. quam antea orbis vel non
 “ habebat, vel certe ejus virtutem ignoraverat. And upon eating of its leaves,
 “ miram per sentit animi lætitiā & vigorem vacandi divinis contemplationi-
 “ bus; with which he acquainted his disciples: and thus, in vulgum receptus
 “ est nobilissimæ stirpis usus nunquam satis dilaudandus.” *Vid. Kemp. Amœ.
 Ext.* p. 608.

S E C T: II.

The leaves are subastringent, and narcotic; but the infusion, partaking more of the virtues of the warm water, sugar, and milk, than of the tea, is diluent, antacid, and anthyphotic.—It is said to be cephalic and analeptic; and is commended in lethargic diseases, comatous fevers, headaches, especially after drinking, gravel, gout, &c. though hurtful to weak, lax, delicate constitutions, causing tremblings and shakings of the head and hands, loss of appetite, vapours, and other nervous diseases, if much used.

“ Theæ

“ Theæ vis in sale volatili blando, potius quam fixo, consistit, quod acida
 “ quævis dissolvit, & per urinam educit; unde in cruditatibus mali hypo-
 “ chondriaci, podagra, arthritide, & nephritide, mire conducit; spiritus valde
 “ augeat & confortat, eosque in continua agitatione conservat, proinde etiam
 “ cephalicum audit, & in confortanda memoria, arcendo somno & inducendis
 “ vigiliis elegans remedium est. A Chinesibus laudatur in comate tam som-
 “ nolento quam vigili.” *Herm. Cyn.* p. 500. “ Siccat & leviter astringit,
 “ acida dissolvit & per urinam educit; hinc prodest in hypochondriaco affectu,
 “ podagra, arthritide, & nephritico; cephalalgiam arcet, memoriam confortat,
 “ sanguinem purificat, &c. Bohea duntaxat sanativa & balsamica habetur,
 “ naturæ languentis restauratrix, & adversus phthisin & tabem prophylactica.”
Dale 321. “ Adstringit & roborat; vim habet diureticam & vulnerariam;
 “ valet ad affectus capitis, scilicet soporem & dolorem, præcipue ab ebrietate
 “ inductum.” *Nucl. Belg.* 290.

1. Tea is of a bitterish, subastringent, and somewhat aromatic taste, and mild not unpleasant smell. “ Folia sunt saporis exsiccantis, cum quadam
 “ amaritudine. . . Foliorum vero bonitas in grata fragrantia (proxime autem
 “ ad fœni accedentis (*pro recentis*) odorem, tantisper aromaticum accedit)
 “ colore viridi, sapore subamarè dulci.” *R.H.* 1620. “ Saporis est subamari,
 “ & subausteri; odoris violacei.” *Nucl. Belg.* 290. And green vitriol turns
 the infusion black like ink. Hence it might be numbred among the sub-
 astringent vulneraries, and mild antiscorbutics, such as agrimony, &c. did not its
 effects discover a very different quality in it. For—2. The infusion (especially
 to such as are not much accustomed to it) hinders or prevents sleeping, more
 than the same quantity of a thin watry fluid, such as warm water with sugar
 and milk, can do. But—3. It also remarkably affects the nerves. “ Foliis
 “ maligna quædam vis, & inimica cerebro qualitas inest, qua spiritus animales
 “ turbando, mentem inebriat, & tremulum inducit nervorum motum: quæ
 “ vero assiduo frigendo, egregie corrigitur, ita ut eliminata narcosi, blanda
 “ remaneat animales spiritus refocillandi efficacia.” *Kæmpf. Amœ.* p. 611. who
 elsewhere owns, that this narcotic quality is not quite driven away even by the
 frying or toasting used in curing it. “ Torrendo enim non modo folia ex-
 “ siccantur, verum etiam castrantur maligna sua & inimica cerebro qualitate,
 “ ut in usum humanum mitigentur. . . Nota morem obtinere in Sina potissi-
 “ mum, ut folia primæ collectionis, ante ustionem, bullienti aquæ immer-
 “ gantur per dimidium temporis minutum, quo facultas narcotica, qua maxime
 “ scatent folia magis succosa recens nata, duplici correctione eliciatur. . . Ra-
 “ tione virtutis qua Thea pollet dictum quod inebriandi & spiritus animales
 “ turbandi facultate polleat, quæ ustione expelli debeat: non potest autem
 “ ita sufficienter debellari, ne remaneat quædam cerebro inimica qualitas,
 “ sed quæ sua mitescit sponte, viz. mora decem pluriumve mensium. His
 “ elapsis tantum abest ut spiritus turbet, ut potius blande excitet, & eorum
 “ organa demulceat, adeoque exhilarandi præstet efficaciam. Intra annum
 “ sorbillata delicatissime sapit quidem, sed turbat, copiose assumpta, mentem
 “ & tremorem inducit articulis. Optima delicatissima, & maxime exila-
 “ rans est, quæ unius anni ætatem habet: recentiore Japonum nemo b'bit,
 “ nisi mitigatam admixta æquali portione Theæ vetustioris. . . Omnis Theæ
 “ potus suppressit medicamentorum efficaciam.” Cætera vide apud Kæmp-

ferum; against whose testimony nothing can be excepted, since he was evidently no enemy to this kind of liquor.—That somewhat of its narcotic quality remains, even after it is brought to us, I have several times found to my own experience; though it must be owned, that many have indulged themselves in a pretty liberal use of this drink for many years, without any prejudice from it. But the same may be said of opium. And it is as certain that not a few have been hurt by it. “Hunc potum quibusdam nocuisse videtur experimento sæpius probatum: inter alia hoc patet sequenti historia. Mulier vegeta & sana potui Theæ addicta, conqueritur de frigore acri interiora concutiente, præsertim noctu, quod a Theæ potu derivandum putat hanc ob causam, quia eo potissimum corripitur ubi huic potui indulgit. Memini ante aliquot annos, virum robustum conquestum esse de frigore acri in abdomine, quod etiam potui Theæ, quem quotidie sumebat, imputat.” *Ex Ant. de Heyde. obs. 76. communicavit D. Hulse. Vid. R. H. 1620.* “In India quoque observavit Herm. Nicol. Grimmus, immoderatos Theæ potatores in diabetem & marcorem delapsos. Ipse tandem nonnullos ab ejus nimia ingurgitatione, insomniis, vertigine, & spasmodicis membrorum subsultibus affectos fuisse plus semel observavi.” *Geoff. ii. 280.* It is not without reason believed by some, that the frequency of nervous diseases in Britain, and the consequent dram-drinking, is much owing to the too customary and frequent use of this liquor. “I have known many hysterical cases relieved, and some cured, by leaving off Tea, without taking any remedy whatever; and one in particular, which was attended with terrible convulsions.” *James Disp. 455.* What effect would an Extractum Theæ have on dogs?—4. However extravagantly it is said to be commended by the Chinese (*Vid. R. H. 1620.*) yet their physicians, such as they are, own excess in it to be hurtful. “Theæ potum qui toto die biberet fortiter extractum, eum vitæ suæ, quæ in calido humidoque residet, radicale fomentum destruere asserunt medici Sineses.” *Kæmpf. l. c.* who says also, “Virtutes paucis comprehenduntur, si quis dicat, Theæ liquorem obstructions viscerum referare, defæcare sanguinem, præsertim vero eluere tartaream calculi materiem.” If Tea keeps the Japanese from the stone, it has not that effect here; as I could prove by many instances.—In a word, all the beneficial qualities of Tea are owing to the warm water, sugar, and milk. Its astringency is of little consequence, thus diluted: where this property is wanted Tea is rather hurtful.

“Blanda donatur adstrictione, odorem subtilem & pergratum exhalat, unde concludere licet constare ex mediocri salis volatilis oleosi portione cum terra astringente conjuncti. Sua adstrictione ventriculum roborat, & impedit quo minus largior aquæ calidæ potus ventriculi fibras nimis laxet. Eadem adstrictione viscerum obstructions referat, modo tenaciores non sint, eorum nempe fibrarum tonum & oscillationem restituendo. . . Partibus vero actuosis & volatilibus sanguinem rariorem efficit, lympham paulo spissiore attenuat & solvit: sic diuresim vel transpirationem promovet, capitis dolorem sedat, somnum arcet, &c.” *Geoff. ii. 279.*

“Catalogum authorum qui de hoc frutice scripserunt vide apud *Jac. Breynium*, *Exot. Centur. 1. cap. 52.* quibus adde *D. Pecklin*, Belgæ, *Tractatum de Thea 1684 editum, M. du Four*, *Historiam Theæ, Lugd. impref. 1685.* & *Tractatum quendam Anglice conscriptum Londini 1682.* Verum omnibus

“bus quæ de Thea scriptæ ab aliis sunt observationes *D. Wilhehniten Rlyne*,
 “magni imperatoris Japoniæ medici, præferendas censemus, quæ apud Jac.
 “Breyonium habentur in appendice ad Exot. Cent. 1.” *R.H.* 1619. But
R. H. and Kempfer. Amæn. Exot. Falc. 3. p. 605. &c. may serve for all.

T H Y M U S.

S E C T. I.

Thymus. off. *Thymus vulgaris*, folio tenuiore. *B.P.* 219. *T.* 196. *Thymum durius. Dod.* 276. *Ger.* 573. *R. H.* 521. *T. durius, vulgare. Park.* 7. *T. vulgare durius. H. Ox.* iii. 401. *T. vulgare, rigidius, folio cinereo. J. B.* iii. 263. *Thymus, erectus, foliis margine reflexis, ovatis; floribus verticillato-spicatis. H. Cliff.* 305. Common Garden-Thyme, or Musk-Thyme.

It grows wild in Languedoc, Spain, Italy, &c. In our gardens it flowers in July. The leaves and tops are used. “*Officin. Herba seu folia & femina.*” *Schrod.* 692. “*Ufu herba.*” *Dale* 143. *Ph. Edinb.* “The whole plant is
 “used.” *Miller Bot.* 437. “*Θυμος Dioscor.* l. 3. c. 44. (p. 190.) & *Theoph.*
 4. hist. 7. & 6. hist. 2. 1. caus. 5. ἀπο τῆς θυμῶς, quod iis qui animi deliquium
 “patiuntur adhibeatur: alii ἀπο τῆς θυμῶς καὶ τῆς θυμῶς deducunt, quod
 “hoc veteres in sacris, quæ igne accenso fiebant, primum usi sint, ut apud
 “Rhodiginum, l. 3. c. 23. legere est. Dioscorides, l. c. capitatum (i. e. *T.*
 “capitatus, qui Dioscoridis *B. P.*) descripsit. *At.* l. 4. c. 179. (de Epithymo)
 “Thymi durioris meminit. Ex *Theoph.* 6. h. 2. duo genera, *Plin.* l. 21. c. 10.
 “& 21. candidum & nigricans propofuit.” *B.P.* 219.

S E C T. II.

It is an acrid aromatic, and so an attenuating diaphoretic; called cephalic, pectoral, stomachic, uterine, carminative, and alexipharmic; and internally recommended in the palsy, asthma, anorrexia, windy colics, hard labour, gout, &c. and externally as anodyne and discutient. It is stronger than serpillum; but, however useful, little used except in the kitchens. “Est denique pro condimento ad sanorum usus perquam utile.” *Dioscor.* l. 3. c. 44. p. 191.

“Calfacit & siccat 3. Saporis subacris; attenuat, incidit, discutit; usus
 “præcip. in affectibus tartareis. 1. Pulmonum, ut asthmate, tussi 2. artuum,
 “ut podagra; omnia viscera referat, appetitum excitat. Extrinsecus in tu-
 “moribus frigidis, sugillationibus, inflationibus ventris, doloribus arthriticis.
 “*Præp.* 1. Aqua, ex herba cum floribus. 2. Spiritus. 3. Oleum.” *Schrod.*
 692. Antacidum, attenuans; acre aromaticum & uterinum est, in *Boerb. Lib.*
de M. M.

It is of a warm bitterish aromatic taste, and very fragrant smell; pleasant to some, though to others it gives the head-ach. “Odoris est jucundi, saporis acris.” *J. B.* “Thymus est planta hic notissima, odoris valde aromatici, quandoque caryophyllos, quandoque citrum redolet; saporis est
 “calidi

“calidi & aromatici.” *Nucl. Belg.* 293. Hence it seems not to be well known to the authors who have wrote on it. “Nostratibus usurpatur pro olere, & jusculis incoqui solet: calore suo ventriculum refocillat, & concoctionem promovet.” *R. H.*

T I L I A.

S E C T. I.

Tilia. offic. *Tilia fœmina*, folio majore. *B. P.* 426. *T.* 611. *Tilia. Dod.* 838. *Tilia fœmina. Lob.* 606. *Ger.* 1483. *Tilia fœmina major. Park.* 1406. *Tilia vulgaris platyphyllos. J. B.* 1. ii. 133. *R. H.* 1694. *Syn.* 473. *Tilia. Lin. G. Pl.* 232. *H. Cliff.* 204. The Common Lime, Line, or Linden-Tree.

It grows wild in Sweden, Denmark, Germany, &c. But I doubt its being a native of Britain. It flowers in May and June. *R. H.* in June. *Dale* 330. in July. *Miller Bot.* 438. The flowers are used. “*Officin.* Flores, folia, cortex, semen, lignum.” *Schrod.* 693. “Cortex, folia, flores.” *Phar. Lond.* edit. 1721. “Folia & flores. *Dale.* “We seldom use any thing but the “flowers.” *Miller Bot.* “Flores.” *Pharm. Edinb. & Lond. novæ.* I find it not in Hippocrates, Dioscorides, Galen; nor any of the Greeks, except Theophrastus, “qui luculenter Tiliam describit.” *Bod. in Theoph.* p. 179.

“*Tilia. Theoph.* 3. hist. 10. (p. 160.) *φιλύρα* dicitur, quod in tenues assulas “sive philyras discerpatur: & inter corticem & lignum, aliæ tenues interiores “cortices sunt, & veluti membranæ, a quibus aliarum quoque arborum cortices interiores, Tiliæ & Philyræ vocantur, quod ex *Plinio* l. 16. c. 14. & l. 24. c. 8. colligere est. . . . Mirum profecto quod *Plinius* l. 17. c. 16. scribit, Tiliam juxta Tiburtes conspici omni genere pomorum onustam, alio “ramo nucibus, alio baccis, aliunde vite, ficis, pyris, punicis, malorumque “generibus, sed cui vita brevis fuit.” *B. P.* “Tilia, si Scapiæ credimus, “quasi Telia, quod lignum ejus ad telorum usus sit utile, ob levitatem ejus. “At *Martinius* *ατὶλεν*, penna, nempe ob foliola albicantia pennas referentia, “unde umbellatim flosculi efflorescunt.” *R. H.* 1694. “Sculptores simulachrorum ex hujus materia, omnia pene simulachra exculpunt. Levis enim “est, tenax, facile secatur, diu durat, nec teredini obnoxia est. Carbones “hujus omnium optimi sunt pro pulvere pyrio conficiendo, item pro delineationibus pictoribus expetiti e cortice funes, & corbes, lagenæ & cunæ, ut “Theophrastus, vel potius cistæ, aliaque vasa texuntur.” *R. H.* 1695.

S E C T. II.

The flowers of this tree agree in virtues with the flores lillii convallium & paralysis; being called cephalic; and are recommended in the vertigo, apoplexy, epilepsy, hysteric fits, &c. They may be used any way. They were in the aqua pæoniæ composita *Pharm. Lond.* edit. 1721. but are seldom kept here.

“Flores

“ Flores calfaciunt & siccant, partium tenuium, discutiunt, cephalici sunt.
 “ Ufus præcip. in epilepsia, apoplexia, vertigine. Folia ac cortex siccant, re-
 “ pellunt, urinam ac mentes cient. Extrinsecus ambustis subveniunt (muci-
 “ lago scil. extracta & inuncta) semen fluxionibus quibuscunque medetur,
 “ etiam hæmorrhagiæ narium (naribus scil. inditum) lignum in titiones aceti
 “ aspersione redactum, sanguinem coagulatum fortiter resolvit. Extrinsecus
 “ adhibentur folia in aphthis ac tumoribus pedum discutiendis: corticis mu-
 “ cilago in ambustis ac vulneribus magni est solaminis. N. humor defluens
 “ e medulla dissectæ Tiliæ capillorum defluvio succurrit. *Præp.* 1. Aqua
 “ stillat. ex floribus. 2. Conserva, ex floribus.” *Schrod.* 693. “ Arbori
 “ huic quoque haud raro innascitur viscus, quem querno in affectibus epilep-
 “ ticus quidam præferunt. De aqua florum Tiliæ notandum, quod tota pro-
 “ deat mucilaginosa, si ignis urgeatur.” *Boecler. in Herm. Cynsf.* p. 593.

1. The flowers are of a sweetish, subviscid taste, and very pleasant sweet
 smell. “ Liber est dulcis, flores suaveolentes, seminis nucleus dulcis.” *J. B.*
 “ Flores sunt odoris leniter aromatici.” *Nucl. Belg.* 293.—2. All the plant,
 but especially the bark, contains a soft mucilage, void of all acrimony, so ra-
 ther softening than astringent or repellent, of use for the aphthæ, burnings,
 and wherever acrimony offends. “ Basilæ & alibi pauperiores, adventante
 “ hyeme, Tiliæ folia recondere solent, pro vaccarum & caprarum pabulo.”
J. B. If the folia visci are good feed for cattle, they are probably of the same
 nature with the folia Tiliæ; and either may be serviceable in the epilepsy,
 if occasioned by irritation. “ By an infusion of the flowers in water, after
 “ the manner of tea, with long and constant use, I have known, says Hoff-
 “ man, an inveterate epilepsy perfectly cured.” *James’s Dispens.* p. 456.

L E C T U R E LXI.

T R I F O L I U M P A L U S T R E.

S E C T. I.

Trifolium palustre, Trifolium fibrinum, *off.* Trifolium palustre. *B. P.* 327.
Dod. 580. *J. B.* ii. 389. *R. H.* 1099. Trifolium paludosum. *Ger.* 1194.
Park. 1212. Acopa Dioscoridis. *H. Ox.* iii. 604. Menianthes palustre. *Lugd.*
 1020. Trifoliata paludosa. *H. Ox.* ii. 149. Menyanthes palustre, latifolium
 & triphyllum. *T.* 117. Menianthes palustre, triphyllum; latifolium, & an-
 gustifolium. *Inst. R. H. R. Syn.* 285. Menyanthes foliis ternatis. *Fl. Lap.* 50.
H. Cliff. 52. Marsh-Trefoil, or Buck-beans.

It is very common in all our boggy and marshy grounds, flowering in May
 and June. The leaves are used. “ Usu herba.” *Dale* 189. “ The leaves
 “ are used.” *Miller Bot.* p. 441.

There is in *Theoph. hist.* l. 4. c. 11. p. 453. a *μηνανθες*, i. e. mensiflora, or,
 as others read it, *μυμνανθες*, correcting the text by Dioscorides, and supposing
 it to be a Trifolium, no where else mentioned by Theophrastus. Vid. *Bod. in*
Theoph. p. 455. 2. But the *μηννανθες* Dioscoridis is the same with the *δοσφαλ-*

τιον, a very different plant from this, viz. *Trifolium bitumen redolens*. *B. P.* 327. or stinking Trefoil. “*Trifolium* (τριφυλλον) alii ὀξυφυλλον, alii μνηστανθες, alii asphaltium, alii denique *Cnicium* vocant. Frutex est supra cubiti altitudinem assurgens, at virgas habens tenues, nigras, junceas, non sine ramulorum appendiculis, in quibus folia exeunt loti arboris foliorum similitudine, eaque terna in singulis germinibus. Odor illorum, ubi recens nata sunt, rutæ; postea quam vero adoleverunt, bitumini proximus, &c.” *Dioscorid.* l. 3. c. 123. p. 224. Vid. *Sar. Scholia.* p. 69.

S E C T. II.

It is an attenuating antiseptic, diaphoretic, diuretic, and laxative; said to be stomachic; and is recommended in the scurvy, scrophulæ, dropsy, rheumatism, gout, agues, jaundice, diseases of the skin, &c.

“Herba hæc Germanorum amasia, nuperis annis, in magna existimatione esse cœpit. Nonnulli ad morbum articulare, alii ad scorbuticos affectus ad febres intermittentes & catarrhos eam commendant, & in hydropicis affectibus valde proficuum esse existimant D. T. Robinson.” *R. Syn.* 285. Scorbuticum acrius est in *Boerb. Lib. de M. M.*

For 1. It is of a very bitter and disagreeable taste; and somewhat fetid smell, especially when green. “Ingratissimi odoris & saporis est.” *R. H.* “Tota planta est amara.” *Nucl. Belg.* 296. “Folia sunt saporis acris admodum, instar piperitidis, aut nasturtii, & amari; odoris olidi.” *Boccler. Cynosur. contin.* p. 420. Did he ever taste it?—2. Analysed, besides some acid liquors, it yields some volatile salt, assez de terre, and much oil. It contains a sal ammoniac involved in sulphur and terrestrial parts; so is proper for the scurvy, gout, cachexy, dropsy. In the paroxysm of the gout, the patient ought to drink, every four hours, a glass of the decoction of this plant.” *T. hist.* p. 494.—3. “D. Tanc. Robinson se sæpius observasse ait oves tabidas, in paludes hac herba abundantes compullas, ejus esu sanitati restitutas.” *R. H. Linnaeus* says that in Lapland they give the roots to their cattle, “in penuria fœni & pabuli, quæ easdem consumunt totas.” And that the common people, in times of scarcity, make bread of these roots dried, with a little meal, which is “admodum amarus & detestabilis panis.” Vid. *Fl. Lap.* p. 50.—4. It is much commended almost in every chronic disease. *Sim. Paulli* gives some instances of its extraordinary effects in the scurvy. Vid. *Quad. Bot.* (edit. 1667.) p. 156. *Tilingius de Trifolio fibrino, in Miscel. A. N. cur.* De cur. 2. an. 2. obs. 74. & *R. H.* I knew it have very remarkable effects in the gout, in keeping off the paroxysms, though not to the patient’s advantage.

It may be used any way: but does best in medicated wines, or ales, and by way of tea. Trif. palustre, rhapontium, & cort. aurantiorum, make a good herb-ale in the spring, especially if a little senna be used with them.—N. B. “Its good effects in scorbutic and scrophulous diseases have been warranted by experience. Inveterate cutaneous diseases have been removed, by an infusion of the leaves, drank to a quart a day, for some weeks.” And Boerhaave relates, “that he was relieved of the gout by drinking the juice mixed with whey.” Thus *N. Disp.* p. 221. *Where is this related?*

T U S S I L A G O. *Vide Roots.*

V E R B A S C U M.

S E C T. I.

Verbascum, Tapfus barbatus. *effic.* Verbascum mas, latifolium, luteum. *B. P.* 239. *T.* 146. *R. H.* 1094. *Syn.* 287. V. latius. *Dod.* 143. V. vulgare, flore luteo, magno; folio maximo. *J. B.* iii. 871. V. album, vulgare; sive Tapfus barbatus communis. *Park.* 60. V. foliis incanis, mas, latifolium, floribus luteis, arcte caulibus adhærentibus, sine foliis angustis inter flores emanantibus. *H. Ox.* ii. 485. Tapfus barbatus. *Ger.* 773. Verbascum caule simplici, superne floribus sessilibus clavato, foliis utrinque lanigeris. *H. Cliff.* 55. White-Mullein, High-taper, Cows-Lungwort. "It is commonly called Thapfus barbatus." *T. Hist.*

It grows in the borders of fields, banks of ditches, and sometimes on walls and rubbish. *R.* "It grows in highways and by hedge sides." *Miller's Bot.* 449. flowering in July the second year. The leaves are used. "*Officin.* Folia, flores, radix, sed raro." *Schrod.* 697. "In usu sunt folia, flores." *Dale* 189.

"Verbascum, φλεμος *Dioscoridi*, l. 4. c. 104. a φλεγω, uro, quasi φλογος, flamma, quia hujus pro elychniis usus est." *B. P.* "Verbascum nonnullis quasi Barbascum dictum putatur, quia folia ejus pilosa sunt: Italis enim Barbasso, & prima species vulgo Tapfus barbatus dicitur. *Plinius* a Verbena deducit. *Græcis* φλεμος appellatur, ἀπο της φλογος, a flamma, quod ejus foliis & caulibus in laternis pro elychniis uterentur." *R. H.* It should be Tapfus barbata. "Ericinaque Tapfos." *Lucan.*

"Phlomos quæ mas appellatur, albis est, oblongis, angustioribusque (quam fœmina) foliis, ac tenuiori quoque caule." *Dioscorid.* l. 4. c. 104. p. 284. *Does this agree with our Verbascum?*

S E C T. II.

It is emollient and anodyne; called pectoral; and commended internally for a cough, hæmoptoe, colic pains, hæmorrhoids, tenesmus, &c. and externally for tumors (especially about the anus, procidentia ani, & uteri) contusions, inflammations, pains, gout, sore throat, &c.

"Calfacit moderate ac siccat, emollit, discutit, dolores lenit. *Usus præcip.* "in morbis pectoris, tussi, expuitione sanguinolenta, torminibus ventris. "N. radix hæmorrhoidum fluxum & dolorem sistere dicitur (diebus 9. vel 10. continuis assumpta.) Extrinsecus sunt flores ac folia præcipuæ æstimationis "in sopiendis doloribus quibuscunque, & imprimis in affectibus ac tumoribus "ani (hæmorrhoidibus) in capillis luteo colore tingendis. *Præpar.* 1. Aqua "stillat. ex floribus. 2. Oleum, ex infusione iterata florum in ol. olivarum." *Schrod.* 697. Molle emolliens & leniens est in *Boerb. Lib. de M. M.*

1. It is of a soft, herbaceous, scarcely-rough taste, and smells of elder. "Flores odore obscuro, non ingrato." *J.B.* "The leaves are of an herbaceous taste, a little saltish and styptic; they smell like elder, and redden considerably the blue paper: the flowers redden it more; they are styptic also, but sweet. The salt of this plant seems somewhat to resemble the salt of coral, containing much acid, and little sal ammoniac, but united to a great deal of sulphur and earth." *T. Hist.* p. 162. Here is no analysis of it.—2. Foliorum thea is little tinctured, and of a soft, but somewhat disagreeable taste: oleum tartari makes it a little fetid: it dilutes only syrup of violets; but turns solutio heliotropii pretty red: vitriol gives it a greenish black colour, but precipitates slowly and sparingly: sp. vitrioli again clarifies it, but in a day lets fall a white mucus. Hence its salt appears ammoniacal, while it is (subastringent, and also) subviscid. "The leaves are of a demulcent quality; for which reason they are used in decoctions, clysters and cataplasms, in all disorders where acrimony offends; being of great service, by their insipid, viscous, emollient, and saponaceous juice." *James's Disp.* 464. From *Boerh.* (*hist. pl. dicta*, p. 306.) not much amiss. So it may be said to be heterogenearum partium.—3. "The country-people, especially the husbandmen of Kent, give their cattle the leaves against the cough of the lungs, being an excellent approved medicine for the same; whereupon they do call it bullocks lungwort." *Ger.*—4. It is commended in many diseases, both outwardly and inwardly, but used in few.

"Tapfus barbatus specificum est contra tympanitem, autore Grembs. . . Hujus folia, plantis pedum nudis intra calceos supposita, paucis diebus ante debitum purgationis tempus, menses remorantes leniter movent & educunt." *R.H.* 1095. "Folia sunt saporis falsi & styptici, redolentque sambucum; subadstringunt; sunt anodyna; valent ad inflammationes, anginam, hæmorrhoides, dysenteriam, tenesmum, & colicam in enematibus; emolliunt tumores duros & discutiunt." *Nucl. Belg.* 301.

V E R B E N A.

S E C T. I.

Verbena, Verbenaca, Peristerium. *offic.* Verbena communis, cœruleo flore. *B.P.* 269. *T.* 200. *H.Ox.* iii. 408. Verbena communis. *Ger.* 718. Verbena vulgaris. *J.B.* iii. 443. *R.H.* 535. *Syn.* 236, Verbena mas, seu recta, & vulgaris. *Park.* 674. Verbenaca recta. *Dod.* 150. Verbena, foliis multifidolaciniatis, spicis filiformibus. *H.Cliff.* 11. Common Vervain.

It grows in the fields, near highways, &c. and flowers in July and August. The leaves are used. "*Officin.* Herba, seu folia." *Schrod.* 697. "*Usu.* Ra-dix, herba." *Dale* 148. *Pb. Lond. Vet. Pb. Edinb.* "The whole herb is used. *Miller's Bot.* 450.

Verbena, quasi herbena, because all herbs used in sacred rites were so called. Hence *Virgil*, "Verbenas adole pingues & mascula thura." *Ecl.* viii. v. 65. and *Terence in Andria*, "Ex ara hac sume Verbenas tibi." Others derive it from *Verro*. "Nulla Romanæ nobilitatis plus habet quam Hierobotane. Aliqui-
"Periste-

“ Peristereon, nostri Verbenacam vocant, hæc est quam legatos ferre ad hostes indicavimus: hac Jovis mensa verritur, domus purgantur, lustranturque.” *Plin.* l. 25. c. 9. p. 640. So Verbena seems to have been an appellative, but Verbenāca the proper name of a particular plant. Vid. *J. B. & Bod. in Theoph.* p. 616. a.

Dioscoridis l. 4. c. 60. p. 264. is *περι περιστερεωνος*, de Peristereōne, seu Verbenaca recta, but its description does not well agree with that of our Vervain: cap. 61. is *περι ιερης βοτανης*, de Hierabotane, seu Verbenaca supina, of which he says, “ Herba sacra (*ιερη βοτανη*) quam etiam nonnulli Peristereōna vocarunt, ramulos emittit cubitales, aut etiam majores & angulosos, circa quos folia sunt ex intervallis, quernis similia, sed angustiora, minoraque, divisuris incisa per ambitum, & colore aliquatenus glauco; radicem longiusculam & gracilem, flores purpureos ac tenues. . . . Cæterum sacram herbam ideo vocant, quod in expiationibus sit ad amuleta perutilis.” Which description agrees pretty well with our plant. It is peristereon, (*ωνος*) ōnis, *m.* Peristereos, *ei, f.* or Peristereum, *ei, n. g.*

S E C T. II.

It is an attenuating and subastringent vulnerary; called cephalic; and commended for pains and other diseases of the head (the epilepsy not excepted) and eyes, for inveterate coughs, jaundice, dysentery, stone, gout, ague, &c.

“ Calfacit & siccit, saporis amari, astringit, cephalica ac vulneraria est. *Usus præcip.* in dolore aliisque affectibus capitis (a frigidis humoribus) in affectibus oculorum & pectoris, in tussi inveterata, in obstructionibus epatis, lienis, ictero, torminibus ventris, dysenteria; imprimis atterit ac expellit calculum, libidinem coercet, febrim tertianam fugat, arthritidem mitigat, vulnera sanat, partum faciliat. Extrinsecus in cephalalgia, odontalgia, alopecia, melancholia; in oculorum lippitudine, imbecillitate, rubore; in angina, in raucedine (collo circumplasmata) in tumore glandularum, in faucibus (gargaris) in dolore lienis, (cum azung. porci) ac podagrigo mitigando, in vulneribus astringendis, ac putridis abstergendis, in procidentia ani, &c. Then there a No. 1. how some cure agues by it; N. 2. how others amuletice strumas illis curatas statuunt; and No. 3. In dolore capitis sedando quantum valeat, si de collo suspendatur, videre licet apud Forestum, lib. 9. obs. 52. (p. 301.) *Præp.* 1. Aqua stillat. ex herba cum floribus æstate collectis. 2. Est & unguentum de Verbena, alias unguentum Jovis dictum. *Vid. August.*” *Schrod.* 697. A wonderful plant! Yet I find it only among the aperientia deterfiva ad ulcus apertum pulmonis, in *Boerb. Lib. de M. M.*

1. It is of a bitter and subastringent taste, and no smell. “ Radix est sub-amara.” *J. B.* “ Verbena saporis est amari.” *Nucl. Belg.* “ This plant, by a chemical analysis, gives several acid liquors, much oil, and a considerable quantity of volatile salt, and of earth; so seems to contain a sal ammoniac, united to much sulphur. Vervain is vulnerary, deterfiva, aperitive, febrifuge: for the green-sickness, they drink the wine in which it is infused for a night. *Cæsalpin* commends the powder for the dropsy. The

“ extract or juice cures agues. Tea of the leaves is given to persons subject to vapours.” *T. Hist.* p. 309.—2. Foliorum thea is pretty well tinged, pretty bitter; and somewhat astringent, without any proper smell. It diluted syrup of violets; but gave sol. heliotropii a pale wine colour: ol. tartari made it orange, and precipitated a whitish mucus,—but was not fetid. Vitriol turned it first green and then black, precipitating little and slowly.—3. It is too much commended to be little used. As for the root, I know no use made of it but as an amulet for the king’s-evil, for which you have the authority of *Marcellus Empiricus*.

V E R O N I C A.

S E C T. I.

Veronīca, Veronica mas, Betonica Pauli. *offic.* Veronica mas, supina, & vulgatissima. *B. P.* 246. *T.* 143. *R. H.* 851. *Syn.* 281. Veronica mas, serpens. *Dod.* 40. Veronica vulgatio, folio rotundiore. *J. B.* iii. 282. Veronica vera & major. *Ger.* 626. Veronica mas, vulgaris, supina. *Park.* 550. Veronica supina, vulgaris, foliis ferratis. *H. Ox.* ii. 318. Veronica caule repente, scapis spicatis; foliis ovatis, ferratis, strigosis. *H. Cliff.* 8. The Male-Speedwell, or Fluellin. *An Veronīca aut Veronīca?*

It grows in dry and hilly pastures, as on Salisbury craigs, &c. flowering in June. The herb is used. “ In pascuis siccioribus & ericetis copiose provenit. Locis apricis, arenosis, & sabulosis delectatur; æstate floret.” *R. H.* “ It grows in woods, and shady places; and flowers in June. *Miller’s Bot.* 451.

“ Veronica apud recentiores herba est celebratissima, Græcis & Latinis scriptoribus forte incognita, quamvis Dodonæus velit esse Betonicam Pauli, lib. 7. (p. 616.) Cæsalpinus vero ad myosotidem Dioscoridis, at columna ad Alysson ejusdem, referendam censet.” *B. P.* “ Veronica dicta recentioribus, quasi φερονικη, quod triumphet inter plantas noviter repertas.” *Hoffman*, p. 460. “ Veronica comes perhaps from the Latin word Ver, the Spring, as it were a little herb of the spring.” *Lem. Dict.* 567. Vid *Paul.* l. 7. p. 616.

S E C T. II.

It is a mild subastringent vulnerary; called alexipharmic, cephalic, pectoral, carminative; and is commended in the vertigo, apoplexy, cough, asthma, consumption, ulcers of the lungs &c. colics, gravel, obstructions of the viscera, barrenness, intermitting and pestilential fevers, scurvy, scabies, gout, rickets, aphthæ, wounds, and what not?

“ *Officin.* Folia, flores. *Vires.* Calfacit & siccit, saporis amari & astringentis, incidit, vulneraria est insignis ac sudorifera. *Ufus præcip.* in erosione & obstructione pulmonum, lienis, hinc & imprimis in colica, phthisi, scabie, pruritu, peste, vulneribus, &c. Extrinsecus famosissima est in vulneribus abstergendis, astringendis, in duritie lienis, in colica (clyst.) *Præpar.* 1. Conserva, ex summitatibus. 2. Aqua stillat. ex herba cum incipit
“ florere.

“ florere. 3. Syrupus, ex succo. 4. Sal ex cinere.” *Schrod.* 698. Aromaticis, aper. deterf. ad ulcus pulmonum, antiscorbuticis lenioribus, & in rachitide propriis, annumeratur in *Beer. Lib. de M. M.*

1. It is neither acid, aromatic, nor bitter; but, as Paulus has it, “ gustantibus nullam fere qualitatem exhibet:” being almost insipid at first, then a little rough, and scarcely bitterish; having no smell. “ Folia sunt saporis amari & acris.” *J. B.* “ Saporis est subamari & subacris.” *Nucl. Belg.* 302. “ The leaves are bitter, and reddens considerably the blue paper. . . By a chymical analysis it yields much earth, acid, and oil.” *T. Hist.* p. 166. “ It is very penetrating, for if it be tasted it affects the whole mouth as if it were set on fire.” *James’s Disp.* p. 465, who takes it from that stupid book, fathered unjustly on the Great *Boerhaave*, as if taken from his mouth, called *Historia Plantarum*, &c. *Romæ* 1727. in 8vo. But if Dr. James had taken proper notice he would have seen, that what I have quoted, as well as a great deal more, is not said of his *Veronica*, but of the *Becabunga*, though true of neither.—2. *Herbæ thea* is only a little bitterish, and subastringent, and not disagreeable: a solution of vitriol turns it black.—3. The simple distilled water is said to be green by *Elsholtzius*, (in his *Destillatoria curiosa, Berolini*, 1674, in 8vo.) though performed in glass vessels: and that this colour continues but for three months; but if distilled in wine, the green will be deeper and last more than a year. *Vid. Schrod. Mang.* p. 499.—4. *Veronica* is called by some European Tea; and is justly preferred to the Asiatic, being reckoned an universal purifier and sweetner of the blood; but more especially useful in a scorbutic and purulent acrimony. It is not only commended in many diseases, but there are many observations in authors of its good effects in not a few; as in barrenness, in *Sim. Paulli Quad. Bot.* p. 513; spreading ulcers. *Ibid.* 512; stone in the kidney for sixteen years. *Germ. Ephem.* an. 1. obs. 107; *Fistulæ thoracis. Ibid. Decur.* 2. an. 3. obs. 166. *Vid. R. H.* “ *Fr. Hoffmannus*, late *Prof. M. Hallensis*, his *Dissertatio inauguralis* was *De Infusi Veronicæ efficacia præferenda herbæ Theæ. Halæ* 1693. in 4to. And we have *Joannis Franci Veronica Theezans*, i. e. *Collatio Veronicæ Europææ, cum Thee Chinitico. Suabaci* 1693. in 12mo.” *Vid. Seg. Bib. Bot.* “ *Vires Veronicæ* tot tantæque esse dicuntur, ut vix satis commendari possit. Sanguinem mundificat, alexipharmaca, & sudorifera, cephalica atque carminativa est. Laudatur interne contra pestem & venena; valet ad icterum; prodest in malo hypochondriaco, scorbuto, scabie, calculo, mictu cruento, asthmate, empyemate, hæctica, viscerum obstructionibus ac exulcerationibus, febribus intermittentibus, rachitide, renum malis, sterilitate: & externe in vulneribus, ulceribus, &c.” *Vid. Bæcler. in Cyn. Herm.* 513.—Yet this has no place in the *London M. M.*

V I O L A.

S E C T. I.

Viola, *Viola Martia*, *Violaria. offic.* *Viola Martia*, purpurea; flore simplici, odore. *B. P.* 199. *T.* 419. *H. Ox.* ii. 474. *Viola nigra*, sive purpurea. *Dod.* 156. *Ger.* 850. *Viola Martia*, purpurea. *J. B.* iii. 542. *R. H.* 1049. *Syn.*

Syn. 364. *Viola simplex* Martia. *Park.* par. 282. *Viola acaulis*, stolonibus teretibus reptatricibus, pedunculis radicatis. *H. Cliff.* 427. Purple sweet Violet.

“ In aggeribus sepium invenitur, sed rarius.” *R. H.* 1050. “ Ad sepes & “ in aggeribus fossarum.” *R. Syn.* “ Violets are found frequently wild in “ the hedges, flowering in March, though what are made use of in the shops “ are cultivated in gardens.” *Müller’s Bot.* 432. The leaves, flowers, and seeds are used. “ Notandum tres *Violæ* partes esse in officinis, sed non sub “ eodem nomine. Flos enim solus *Violæ* nomen retinet: semen & folia *Violæ* “ *laræ*, seu matris violarum.” *Hoffm.* 77. *Viola* dicitur quasi sola, ab *iov* or *Io*: others think quasi *Vitula*. Vid. *B. P.* 198.

“ *Viola* (*iov*) folium habet hederaceo minus, tenuius atque nigrius, alioqui “ haud ita dissimile. Cauliculus a radice medius prodit, in quo flosculus per- “ quam suaviter olens, purpureus. Locis nascitur opacis & asperis. Refri- “ gerandi naturam habet.” *Dioscor.* l. 4. c. 122. p. 289.

S E C T. II.

The flowers of violets are emollient, detergent, diuretic, and purgative; called cordial and pectoral; and commended in bilious fevers, coughs, hoarseness, pleurisy, heat of urine, &c. The leaves have the same virtues, save what depends on the scent: the seeds are much commended as a diuretic in the gravel.

“ *Violaria* (præcipue flos) refrigerat 1. humectat 2. Flores exiccati refrige- “ rant imbecillius, siccantque. Emollit, laxat, cordialis est ac pectoralis, ex- “ pectorationem promover. *Usus præcipui* ac creberrimi in bile, præcipue atra “ mitiganda, in fervore febrium compescendo doloreque capitis inde nato, in “ tussi, asperitate gutturis, catarrhis acribus, pleuritide, &c. No. 1. Flores “ alvum leniter subducunt. No. 2. Locum sibi vendicant inter flores illos “ cordiales famulos. Extrinsecus adhibetur herba crebro in lotionibus, cata- “ plasmatibus, clysteribus & similibus. Seminis usus rarus est, isque in ob- “ structione renum, ubi emulsioni potissimum inservit; de qua nota, quod “ plerumque vomitum ac secessum moveat. dosis ʒß. ad ʒj. *Præpar.* 1.—4. “ Syrupi varii. 5. Conserva. 6. Acetum. 7. Oleum infusum. 8. Aqua “ stillat. ex floribus. 9. Aqua, e tota herba. 10. Tinctura. 11. Extrac- “ tum, ex succo. 12. Trochisci.” *Schrod.* 700. *Violaria aquosa* mollis emol- “ liens & leniens est, in *Boerb. Lib. de M. M.*

1. All the parts of the plant are of a viscous, disagreeable, or nauseous (as it were rancid) taste; and the flowers only smell very sweet. “ Flores odoris “ gratissimi, saporis viscosi & parum acris; semina spirant odorem terebinthi- “ naceum.” *Nucl. Belg.* 304. “ The root of this plant is a little saltish, glu- “ tinous, and deterfive; it reddens not the blue paper, neither do the leaves, “ which are insipid, and more glutinous; the fresh seeds redden it a little, and “ are saltier than the roots. There is a slimy juice in the violet, which in- “ volves the other principles, and hinders their activity: for by a chymical “ analysis it yields several acid liquors, much oil, a good deal of volatile and “ of fixed lixivial salt. . . The infusion rad. ʒj. purges upwards and down- “ wards.

“wards. Poterius says *florum pulv. 3j* purges pretty well.” *T. Hist.* p. 170. —2. *Foliorum thea* is subturbid, very viscid and ropy; of a disagreeable, mucilaginous, and subacid taste. *Oleum tartari* makes it yellow and smell somewhat urinous, without destroying its viscosity; *spir. vitrioli* somewhat diminishes it. It reddens a little *sol. heliotropii*. *Solutio vitrioli* makes it blackish-brown and opaque; which *sp. vitrioli* turns semipellucid, without changing the colour. Since acids turn the flowers red, it is plain the plant contains little of it. Hence it is evidently saponaceous, emollient, and deobstruent, as well as diuretic and cathartic. Externally used it is more efficacious than *althæa*; and inwardly may be of great use in diseases of the breast, urinary passages, obstructions of the viscera, &c.—3. The Greeks seem only to have used it as a cooling diluent. *Vid. Dioscorid.* l. c. & *Galen. Simpl.* l. 6. p. 48. But the Arabians as a purgative emollient, deobstruent, anodyne, yea and soporiferous medicine, as well as pectoral &c. *Vid. Mesue Simpl.* l. c. 11. p. 36. 1. However at present little use is made of it, except the flowers in the *syrupus violarum*: though the herb would do well in infusion (*more theæ*) dried to 3ij; the seed in emulsion to 3℔. And the herb at least deserves to be used as much as any of the emollients in clysters, fomentations, and cataplasms. “*Seinen est lithontripticum insigne, D. Butlero olim inter arcana.*” *R. H.* “*Semen urinam potenter movet. Maximilianus Imp. Medico qui ei illud revelabat numerari jussit 10000 imperiales.*” *Alb. in M. S.* “*Singularem observationem Scholtzius in epist. 192. p. 310. tradidit; subsequens emulsio (inquit) in suppressione urinæ ultra septimum diem, ad miraculum usque exercuit suas vires in conjuge Joachimi Pauwitz, & est secretum divi Maximiliani. Excrevit calculos ultra mille & quingentos, & aliquot urinæ mensuras. R. Sem. viol. purp. 3℔. cum aquæ veronicæ s. q. F. emulsio.*” *Sim. Paulli Q. B.* p. 167. N. B. Water draws a fine purple tincture from the flowers, but spirits only one of an orange colour.

VIRGA AUREA.

S E C T. I.

Virga aurea. offic. *Virga aurea angustifolia*, minus ferrata. *B. P.* 268. *V. aurea vulgaris latifolia.* *J. B.* ii. 1062. *T.* 484. *V. aurea. Dod.* 142. *Ger.* 430. *R. H.* 278. *Syn.* 176. *Virga aurea vulgaris. Park.* 543. 1. *H. Ox.* iii. 124. *Solidago caule erecto, racemis alternis, erectis. H. Cliff.* 409. Common Golden-rod.

It grows in thickets, woods, &c. flowering in August. The leaves and tops are used.” “*Officin. Folia & flores.*” *Schred.* 703. *Dale* 89. *Usu.* *Herba. Pharm. Vet. Lond. & Pharm. Edinb.* “*Virga aurea, quæ a forma & floris colore luteo nomen habet; ab aliis propter vires & solidago & consolida dicitur. Quibusdam pana chironium Theophrasti 9. hist. 20. & Plinii 25. c. 4. &c. B. P.*

“*Solidago Saracenica. Virga aurea est novum genus herbæ, ab Arnoldo villanovano clarigatum, circa illa tempora, quibus Christiani bellum sacrum gerebant contra Saracenos; a quibus reduces afferebant. . . Usualis est illa in.*

“ apud Bauhinum (that is *Virga angustifolia*, minus serrata. *B. P.*) licet sine
 “ errore uti possis & tribus anterioribus, & duabus posterioribus. He has but
 “ six species.) Nullum enim hic discrimen essentielle est.” *Hoffm.* p. 190.

S E C T. II.

It is a subastringent vulnerary and diuretic; called lithontriptic; and is recommended for wounds, ulcers, diarrhœas, dysenteries, hæmoptoes, the strangury, stone, &c.

“ Calfacit & siccat 2. astringit, vulneraria est celeberrima, intrinsecus &
 “ extrinsecus adhibita, nec non & lithontriptica diureticaque non e postremis.
 “ Confert itidem, diarrhœæ & dysenterix; sanguinis expuitione medetur;
 “ mucilaginem renum & ureterum efficaciter abstergit; putredinem gingiva-
 “ rum, dentiumque vacillationem curat. *Præpar.* aqua stillat. ex herba cum
 “ floribus, Julio & Augusto col.” *Schrod.* 703. Est e remediis in nephritide
 (a calculo renum &c.) propriis in *Boerb. Lib. de M. M.*

1. It is of a pretty agreeable subastringent and somewhat aromatic taste, and soft smell. “ Radix, saporis aromatici.” *J. B.* “ Saporis est acris, sub-
 “ amari, & subausteri.” *Nucl. Belg.* 306. “ It is a styptic bitter, and does
 “ not redden the blue paper. Its salt seems to resemble much the natural salt
 “ of the earth, but mixed with much oil and terrestrial parts: so this plant is
 “ vulnerary and diuretic.” *T. Hist.* p. 172. Hear again *Dr. James*: “ This
 “ plant is so acrimonious, that no pepper can be compared with it; though
 “ it leaves not the least relish of acridness in the mouth, but proceeds through
 “ the whole body. It is like the ranunculus acris of the shops, and is of a
 “ moderately or somewhat astringent taste, which at first is not unpleasant,
 “ but leaves an ungrateful relish in the mouth.” (*Dispens.* p. 468. from that
 nonsensical *Hist. Plant.* fathered on Boerhaave, p. 147. though evidently false
 and inconsistent with itself.)—2. Foliorum & summitatum thea is of the colour
 of common brandy; tastes almost like China root, but a little subastringent;
 and has little scent: with syr. viol. it became a little greenish; and with sol.
 heliotrop. of a ruby colour; but did not redden the blue paper. Solutio vi-
 trioli turned it first green, then black, and soon precipitated without becoming
 clear above. This tea with some might pass for a weak and somewhat musty
 bohea. *Mr. Hope* informs me it is a famous lithontriptic at *Aix-la-Chapelle*.—

3. It is commended also in obstructions of the viscera, jaundice, beginning
 dropsies, ulcers in the mouth and throat, loose teeth, putrid gums, &c. but
 especially in the stone and gravel. “ Tantæ ipsius laudes in viscerum ob-
 “ structionibus ad hydropem jam inclinantibus, ut diu in secretis fuerit habita
 “ in decocto. Expurgat enim aquam per urinas. In calculo primam expe-
 “ rientiam habuit dictus Villanovanus, qui in pulvere usurpavit. Et celebrat
 “ in hoc affectu Satyricus novus, qui se Euphormionem appellat. In ulceribus
 “ internis, prodest subductione ichthorum per urinas. . . In externis juvat ex-
 “ siccatione & absterfione quibus facultatibus valde excellit. In exulceratio-
 “ nibus oris mirum quam commendavit olim Saxonia præceptor.” *Hoffman.*
 p. 191. (N. B. *Jean. Barclaii* Euphormionis Satyricon, *Paris* 1605 & 1610. &
Marci 1628. edit. tres. in 12mo. *Bib. Thuana.* ii. 383.) “ De Virga aurea

“ non dubitamus insignissimum ac elegantissimum locum ex Barclaii Satyrico
 “ (p. i. p. 51. seq.) totum laudare transcriptum. Spondet enim calculoso tri-
 “ duanam curationem. Cui cum adnuisset æger, in proximo monte, vota
 “ faciens Aesculapio, virgam auream offendit, herbam scilicet quæ calculo
 “ bellum indixit, multo felicius quam aut veratrum amentia, aut vulneribus
 “ ascyron. . . . Cæterum contusum in renibus calculum in innoxium pulve-
 “ rem solvit. Non in latere, non in vesica dolor, adeo ut tam facili remedio
 “ pudeat calculum timuisse. Etenim in hyemem siccatur æstivis umbris planta,
 “ & ubi gravitas lateris coeuntem morbum præfagit, aureus pulvis ad ʒij. mero
 “ delibutus sumitur, sive ovo levissime cocto permixtus. Recenset vero ob-
 “ servationem, quod ubi recentem plantam adhibere coactus fuisset autor,
 “ primo die nil visum sit ad morbum fecisse medicamentum, sed biduo deinde
 “ repetitum, supra fidem est quam egregie refellerit acerbissimum morbum. . .
 “ Pulveris ejusdem mirabilem successum, a se primo divulgatum, nobilem
 “ matronam comprobasse in innumeris nephriticis scribit Car. Piso. l. de Serosa
 “ collu. p. 388. item probatum dicit Solenander, consil. p. 66.” *Wedelii A-*
mæn. M. M. l. i. § 3. c. 9. p. 185. Whether it is a powerful remedy in the
 stone let experience determine. Certainly it is very safe; and may be taken in
 substance, infusion, decoction, &c. ad libitum. Vid. *Euphormionis Lusini*,
 sive *Joan. Barclaii Satyricon. Amsterodami 1634. in 16°. (potius 32°.) p. 53.*

L E C T U R E LXII.

Of FRUITS.

A M Y G D A L Æ.

S E C T. I.

A Mygdalus. *offic.* Amygdalus sativa. *B. P.* 441. *T.* 627. *R. H.* 1519.
 Amygdalus. *Ded.* 798. *Ger.* 1445. *Park.* 1515. Amygdalus dulcis &
 amara. *J. B.* i. 174. Amygdalus, foliis petiolatis, ferraturis infimis glandu-
 losis. *H. Cliff.* 186. Amygdala amara & dulcis. *offic.* Dale 302. The
 Almond-Tree.

It grows wild in Barbary, particularly in the hedges about Tripoli, and is
 the Amygdalus sylvestris *B. P.* Amygdalus sylvestris in sepibus Tripolitanis
Rauwolfii Ibid. 442. Whence by culture all the varieties of Almonds have
 been produced. It is cultivated in South-France, Spain, &c. but seldom
 ripens the fruit well in Britain, though it flowers early in the spring, some-
 times in March. The kernels of the fruit only are used, of which some are
 sweet, others bitter. “ *Officin.* Utriusque nuclei, Amygdala (*orum*), vel A-
 “ mygdalæ (*arum*), dicti.” *Schrod.* 532. “ Amygdalorum maximorum, medi-
 “ ocrum & minimorum descriptiones, vid. apud *J. B.* Apud nos maximi
 “ æstimantur Amygdala Jórdanica dicta, quæ majora sunt, & longiora, &
 “ angustiora, crassiora tamen & teretiora vulgaribus valentianis, gustu etiam
 “ delicatiore.” *R. H.* 1519.

“ Amygdalus, Græcis Ἀμυγδαλεα, & Ἀμυγδαλή, vocatur: fructus Ἀμυγδαλή & Ἀμυγδαλον. . . . Latinis etiam ut Catoni, nux græca vocatur, quamvis Columella nuces Græcas ab Amygdalis videtur distinguere, unde Ruellius eum per Græcam nucem, tantum Amygdalam amaram intellexisse suspicatur.” *R. H.* 1518. *Dioscorides* does not describe it; but many properties of it are to be found in *Theophrastus* and *Pliny*. Vid. *B. P.*

S E C T. II.

Sweet almonds are antacid and nourishing: the bitter are suspected as narcotic.

Almond milk, or the emulsion of sweet almonds, dilutes, quenches thirst, corrects acrimony, and nourishes; and is much used in all hot, acute, and inflammatory distempers. The oil of sweet almonds relaxes, lubricates, blunts acrimony, and is anodyne; and commended in coughs, hoarseness, heat of urine, nephritic pains, costiveness, &c. The oil of bitter almonds is used only externally as anodyne, for pains of the ears, deafness, &c.

“ Dulces nutritivæ sunt, temperate calidæ & humidæ, humorum acrimoniam lenientes, & hinc dolorem & vigilias ab acrimonia oriundas demulcentes: adhibentur præcipue in emulsionibus. Amaræ sunt cal. & siccæ 2. attenuant, aperiunt, extergunt, diureticiæ sunt, obstructioni jecoris, lienis, mesenterii, uterique conferunt. Extrinsicus lentigines tollunt, si masticatæ illinantur, capitis dolori subveniunt (in frontalibus). *Præpar.* 1. Confectio Am. dulcium. 2. Conf. Am. amar. 3. Oleum expressum Am. dulcium. 4. Oleum exp. Am. amararum. Oleum dulce lenit, maturat, anodynum est, usufque præcipui in colico ac nephritico dolore mitigando (propinatum dosi ʒj. vel ʒij. cum manna, vel & clysmati infusum) infantulis recens natis creberrimo ad tormina ventris compescenda cum saccharo penidiato exhibetur ad ʒij. quin etiam ad mitiganda tormina puerperarum usus ejus creberrimus est. Olei amari vires ex superioribus colligendæ sunt.” *Schrod.* 532.

1. The taste of the one is soft, sweet and agreeable; of the other bitter and aromatic, and not disagreeable: and both very oily and farinaceous.—2. Although the flavour of the bitter almonds recommends their use in ratasias and other palatable drams; yet their effects seem to demonstrate that they contain something of a malignant or narcotic nature. “ Amygdala amara capitis doloribus auxiliatur, fronti temporibusve inducta cum aceto & rosaceo. . . . Porro comesta dolores adimunt, alvum emolliunt, somnum faciunt. . . . quina senave si præsumantur, ebrietatem arcent. Enecant & vulpes cum quamvis esca devorata.” *Dioscorid.* l. i. c. 176. p. 83. “ Dioscorides quidem pridem posteritati reliquit quod Amygdala amara κτεινει ἀλωπεκας βρωθεντα συντινι; verum nemo posterorum, quod sciam, scripto assensum præbuit, aut confirmavit. Marcellus Virgilius, (qui claruit circa 1506.) post literas renatas, de hujus tectus lectione anxius, casu didicit, quod ratione carere videbatur, vulpes nimirum demum Amygdalis amaris enecari, nisi contigerit e vicino aquam lambere, credidit, postquam ab amico fide digno intellexit selem pharmacopœi dulciariis assuetam, comestis 7. vel ad summum 8. Amygdalis amaris, cœpisse primum intus torqueri, & veluti furiosum circum-

“agi; toto tandem corpore distentam, difficillimum mortis genus obiisse,
 “periisseque non ultra horam protracta vita a cibo illo sumpto. . . Postea gal-
 “linas quoque ab his necari etiam casu innotuit. . . *Jenifus* sciuro Amygda-
 “lam anaram lethiferam comperit. Ciconiæ, columbis, gallo gallinaceo, feli,
 “& vulpi, de quo imprimis dubitabatur, mortem attulisse historiæ propositæ
 “significant.” *Wepfer. Cicut.* p. 245. sed vide a p. 235. ad p. 249. where
 you have these histories; and also the effects the bitter almonds had on two
 cats and a dog that escaped with their life: and learned reflexions on the whole.
 And now, one reason for rejecting the aqua cerasorum nigrorum, given by the
 committee, is the use made of bitter almonds in it. “Add hereto, that the
 “distillation is frequently made, in whole or in part, from bitter almonds, a
 “material which is at least equally poisonous with the laurel leaves them-
 “selves.” *Narrat. Pembert. Dispensf.* p. 77.

Though the leaves of the lauro-cerasus *Clusii*, or common laurel, have been
 long used, for their flavour in drams, milks, &c. yet their virulency was never
 suspected till 1728, when two women at Dublin were poisoned by its simple
 distilled water, the one having taken but about $\frac{2}{3}$ of two ounces, and the
 other five spoonfuls. This gave occasion to the making several experiments
 on dogs, which this water killed almost in an instant, in a very small quantity.
 It was observed that neither the infusion nor juice was near so virulent as the
 distilled water. For it required succi expressi ℥iv. to kill a dog, which had taken
 ℥v. of the infusion in less than an hour before. Yet aquæ stillat. simplices
 taxi, lauri, had no such effect. The symptoms on dogs resembled much the
 epilepsy. Vid. *Phil. Transf.* No. 418. p. 84. to p. 100. and No. 420. p. 163.
 So that which is most agreeable, and most volatile in these leaves appears to be
 the most virulent.

“Bitter almonds have been found poisonous to dogs and sundry other ani-
 “mals; and a water distilled from them, when made of a certain degree of
 “strength, has had like effects.” *N. Disp.* p. 78.—“Boerhaave recommends
 “them in substance as diuretics, which heat moderately, and which may
 “therefore be ventured upon in acute diseases.” *Ibid.* “Amygd. amaræ, ob
 “sui amarorem, ad caliditatem inclinant, & minus temperatæ sunt ac dulces;
 “harum oleum expressum diuresin movet, calculum & nephritidem curat, est
 “quoque antipleuriticum.” *Boerb. Hist. Pla.* p. 681. Ill quoted!

“Anal. chymica ex Amygd. dulc. bene maturarum ℔v. prodierunt humo-
 “rum ℥xj. ℥v. gr. xlvi. olei ℥xlii. gr. xxxix. carbonis ℥xij. ℥vij. gr. lxiii.
 “unde cinerum ℥ij. ℥j. gr. lxvi. & inde salis fixi alcali ℥ij. gr. xxi. (terræ ℥xv.
 “gr. xlvi.) ac jactura fuit ℥xij. ℥v. gr. lxix. ” *Geoff.* iii. 76.

S E C T. III.

The sweet almonds are much used in emulsion; an ounce blanched sufficing
 to make a bottle. The oil expressed without heat, and recent, may be taken
 to several ounces.

The cold seeds are expelled the *London Disp.* I wish almonds may supply
 their place. But the sweet are so nearly allied to the bitter, that I cannot help
 suspecting them a little. “Ex Amygdalis dulcibus oleum dulce recenter ex-

“ pressum, frequenter usurpatur. . . Est sane medicamentum *εὐπορίστον*, ad
 “ multa efficax, blandum & gratum; ita ut a plurimis panacea merito habea-
 “ tur. Exhibetur ad ℥j. ℥iv. vel ℥viii. &, pro necessitate, reiteratur tertia,
 “ vel quarta quaque hora.” *Geoff.* iii. 80. But because it soon turns rancid
 I prefer, to what we get from London, good sweet olive oil. Is it any worse
 than the best oil of sweet almonds? How can ol. Amygd. amar. be distin-
 guished from it?

N. B. “ Oleum per retortam multoties distillatum, plurimum humoris aquei,
 “ acris, tum acidi tum alcali urinosi, disjicit, aliquantulum capitis mortui
 “ nigri, in retortæ fundo relinquendo, ita ut totum oleum, per iteratas distil-
 “ lationes, converti videatur in terram nigram, aquam, & aliquam falis tum
 “ acidi, tum alcali urinosi portionem admodum exiguam, . . . Amarum sapor
 “ in expresso (Amygd. amar.) oleo minime distinguitur, licet expressum mag-
 “ na intensam servet amaritatem.” *Geoff.* iii. 77. & 83. who gives the analy-
 sis of green sweet almonds, p. 76. and of bitter almonds, p. 83.—Almonds
 are not easily digested.

A N A C A R D I U M.

S E C T. I.

1. Anacardium, Anacardium Orientale. *offic.* Anacardium. *B. P.* 511.
J. B. i. 334. *Garcia.* Clus. exot. 198. *Acostæ.* Ibid. 272. *Ger.* 1544. *Park.*
 1563. *R. H.* 1813. *Oepata.* *H. Mal.* iv. l. 45. p. 95. Arbor Indica fructu
 conoide, cortic. pulvinato nucleum unicum, nullo officulo tectum claudente.
R. H. 1566. “ Anacardium Orientale. *Jonsf. dend.* 156. *Pluk. Alm.* 28.” *Dale*
 310. The Anacardium, or Malacca Bean-tree. *Dale.* Vid. *Lin. Fl. Zeylan.*
 p. 23.

It is a fruit, or rather nut, of the figure of a bird's heart flatted, black and
 shining on the outside, and containing, within a double skin or shell, the cel-
 lular interstices whereof are filled with a black viscous caustic liquid, a whitish
 kernel, of a sweetish almond-like taste, and no smell, brought from the East-
 Indies.

The Anacardium tree is said to be very large, and to grow in Malabar,
 about Cochin chiefly. The Arabians called it Balador, as did the latter
 Greeks Anacardium, on account of its figure. Vid. *Garciam.* “ Anacardio
 “ nomen indiderunt recentiores Græci (nam veteribus ignotum fuit) a cordis
 “ tum similitudine, tum colore, Arabum vestigia secuti, quibus Balador, In-
 “ dis Bybo dicitur.” *Garcias.* l. c. Yet I find in *Paulus*, l. 7. c. 11. p. 659.
G. a *Theoderetus* ex *Anacardiis* (though not among his simples), a very compound
 electuary, or confection.

2. Anacardium occidentale. *offic.* Anacardii alia species. *B. P.* 512. Aca-
 jou. *Thev. T.* 658. Cajous. *J. B.* i. 336. *Ger.* 1544. *Park.* 1568. Acajaiba
 & Acajuiba Brasiliensibus. *Marcg.* 95-1. Pomifera, seu potius prunifera, In-
 dica, nuce reniformi summo innascente, Cajous dicta. *R. II.* Anacar-
 dium occidentale, Cajous dictum, officulo renis leporis figura. *H. Lugd.* 36.
 (1649.) *Sloan. Cat.* 187. *Hist.* ii. 136. Anacardium. *Lin. G. P.* 181. *H. Cliff.*
 161. The Cajou or Cassu-tree. It

It grows in Brasil, Surinam, Malabar, &c. "Anacardium raro in officinis nostris invenitur, cujus in loco, Anacardium occidentale Jonsoni substituunt, ac pro Anacardio vero vendunt." *Dale* 310 & 311. It needs no description.

S E C T. II.

The kernels are of the nature of almonds; the viscous juice is caustic, and may be used for warts, or so. Some eat the roasted kernels; but the mel & confectio Anacardina, though once famous, have been long and deservedly out of use.

"*Officin.* Fructus, sed raro, calfacit & siccatur, (non 4. nec 3. gr. ut nonnulli volunt, sed remissius) cephalicus est, memoriam ac sensus acuens & confortans. *Præpar.* 1. Electuarium seu Confectio Anacardina. 2. Mel Anacardinum. 3. Oleum, sed rarissimum est." *Schrod.* 532.

"*Mefues* Elect. Anacardino has vires attribuit. Ventris totius inferioris & cerebri affectus frigidos compescit; sanguinem reddit puriorem & inde spiritu reddito purgatiore & tenuiore, sensus omnes, apprehensionem, intellectum & memoriam juvat; coloremque vividum corpori tribuit." *R. H.* 1813. c. *J. B.* i. 336.

1. The kernel is a soft oily farinaceous substance, the taste of which is commended by some: "Ego vero & virentem conditum, & siccata medullam degustavi; sed neutro modo mihi delicatus videtur," says *Acosta*. The proper juice in the cells of the skin "est, secundum Cordum, saporis primum dulcis, mox acris, deinde vehementissime adstringentis, adeo ut fauces in angustiam constringat." *J. B.* and is used as a caustic in strumis. *Vid. Garciam*. And *Acosta* calls it admodum causticum & venenosum; adding, "si quis instillet in putridum & cavum dentem, ipsum urit, frangitque & corrumpit facile." Yet—2. The Indians pickle it green, and eat it like olives; and the confectio was long famous. But green and pickled it is less acrid: and in the confectio the Anacardium made not the 2d part of the composition, cujus dosis ʒij. (in which butter and honey were the excipients) and that prepared too by maceration and coction in vinegar, so could do little either good or ill. For the Confection *vid. Zwelf. Ph. Ang.* p. 256. and for the Mel Anacardinum *Azaravii.* p. 49. "Non admitto vel mel Anacardinum, vel Anacardios quovis modo præparatos. Imo damno confectioem Anacardina, quamvis sapientum dicatur. Imo est confectio stultorum. Habeo enim ab amicis, quosdam ab ejus usu maniacos esse factos, & catenis opus habuisse. In adolescentia mea, cum quidam ex condiscipulis mustarent hanc confectioem, novi preceptorem meum M. Joh. Helderum acerbissime eos increpare, & proponere exempla eorum quibus pessime cesserit. Interim alter preceptor dedisse ferebatur cuidam ex ordine nostro, quem omnes sciebamus asinum esse, qui tamen paucos intra menses, eo doctrinæ proventus est, ut mutato nomine de nobis aliis narraretur fabula. Hic J. C. factus, ad professuram Wirtebergensem adspiravit, sed intra paucos annos ita exsiccatus, ut, cum perpetua siti premeretur, quotidie ad ebrietatem usque biberet; itaque & sibi & suis inutilis factus, tandem misere perierit." *Hoffm.* p. 386. "C. Hoffmannus damnat penitus conf. Anacardina,"

"dynam, . . . quandoquidem quosdam novit ab ejus usu maniacos factos." *Geoff.* ii. 398. *Vid. N. Disp.* p. 79.

BACCÆ ALKEKENGII.

S E C T. I.

Alkekengi, *Halicacabum. offic.* *Solanum vesicarium. B.P.* 166. *Dod.* 455. *Solanum halicacabum vulgare. J.B.* 609. *R.H.* 681. *Solanum halicacabum. Ger.* 342. *Solanum vesicarium, sive Alkekengi. Park.* par. 532. *Solanum vesicarium vulgatus repens fructu & vesica rubra. H.Ox.* iii. 526. *Alkekengi officinarum. T.* 151. *Physalis, caule simplici annuo, foliis integris, ad articulos geminatis, floribus solitariis. H.Cliff.* 62. *Vesicaria. Cæs.* 213. *Winter-Cherry.*

It grows wild in France, about Vienna, Rome, &c. In our gardens it flowers in June, and the fruit is ripe in November; when in colour and size it resembles a small red cherry, included in a large red bladder as big as a walnut. "Halicacabus, Arabice Kekengi, Alkekengi, sive Kekenegi." *Matth.* 757. "Solanum vesicarium, quod folliculi vesicæ inflatæ similes: vel, ut *Plin.* l. 21. c. 31. quoniam vesicæ & calculis profit." *B.P.* 166. 'Αλικακαβος, q. marinus cacabus, ob similitudinem quandam.—"Est & alterum solanum, quod peculiari nomine *Halicacabum* vocant, alii *Physalida*, foliis solano hortensi similibus, verum latioribus: hujus caules posteaquam adoleverunt, proni terram spectant: est autem fructus intra folliculos orbiculatos vesicis similes, fulvus rotundus ac levis, ceu uvæ acinus: quo etiam coronarii utuntur, corollis intorquentes." *Diosc.* l. 4. c. 72. p. 271. *Vid. Plinium.*

S E C T. II.

It is an attenuating antiseptic, and anodyne diuretic; called lithontriptic; and commended in obstructions of urine, gravel, stone, jaundice, gout, &c.

"Baccæ refrigerant & siccant 2. nephriticæ, diureticæ, & lithontripticæ insignes sunt. Usus præcipui in calculo renum ac vesicæ, in ictero (baccæ & folia) in sanguine coagulato. *Præpar.* 1. Aqua stillat. ex baccis. 2. Tinctura ex baccis cum aqua propria. 3. Trochisci de Alkekengi." *Schrod.* 529.

1. They are of an acid taste at first, then pretty bitter; the herb has a heavy or somniferous scent, like that of the common nightshade. "Sapor fructui acidus, cum paucis amarore: *Matthiolo* Baccæ vinoso succo refertæ, sapore austero simul & amaro." *J.B.* "Baccæ saporis sunt subacidi & subamari, illis utimur pro scopo diuretico, in obstructione urinæ, hydrope, calculo & colica nephritica." *Nucl. Belg.* p. 12. "The leaves are acrid and bitter; they do not redden the blue paper, but the fruit reddens it strongly: it appears at first sourish, afterwards it is found very bitter; which gives ground to conjecture, that there is in the fruit a salt resembling the oxyfal diaphoreticum *Asfalæ*, mixed with a little fetid oil: in the leaves the same salt is
"too

“ too much loaded with sulphur and terrestrial parts to be perceived. Alkekengi is very aperitive and diuretic.” *T. Hist.* p. 241. “ Saporis primo subacidi, deinde intense amari.” *Geoff.* iii. 55. “ Winter-cherries are said, by most writers, to be extremely bitter: but, as Haller justly observes, the cherry itself, if carefully freed from the cover, which is intensely bitter, has merely a subacid taste.” *New Disp.* p. 70. Neither of these writers seems to have tasted them.—2. It comes near the solanum officinarum *B. P.* in its botanical character, as well as taste, smell, and facies externa of the herb. Hence the fruit contains an antiseptic acid, (attenuating because) stimulating bitter, of a narcotic quality.—3. “ Analyti chymica ex ceraforum Alkekengi maturorum & recentium lbv. prodierunt humorum lbiv. 3j. gr. xii. olei 3ij. gr. xii. carbonis 3vi. gr. lx. unde cinerum 3j. 3v. gr. xxiv. & inde salis fixi alcali 3j. 3ß. (ergo terræ 3iv. gr. lx.) ac jactura fuit 3viii. 3ij. gr. lx.” secundum *Geoff.* iii. 55. There is an observation (from Jer. Mart.) in *R. H.* of the morbus articularis gravissimus cured by taking eight of the berries every change of the moon, “ in ipso mutationum puncto. Ita expelli per urinam materiam mire fœdam, totumque se ab hoc morbo liberum affirmabat.” And Arnol. de Villa-nova tells of a cardinal cured of an entire suppression of urine for four days, by the vinum Alkekengi, by the advice parvi medici. “ Ex eo solo experimento (says he, lib. de vinis) medicus ille cum parva scientia, & pauper, factus est magnus & dives.” *Herm. Cynos. Boecl.* p. 319.

S E C T. III.

The dose is commonly made Baccar. N. x. or xii. each weighing about 3ß. or 3ij. But in a MS. attributed to *P. Albinus*, it is said he often did eat forty or fifty of them at a time.

“ Sumi possunt crudi iii. iv. vi^{re}. Eorum succus expressus, & coctione defœcatus ad 3j. præscribitur; aut ad extracti spissitudinem extractus, ad 3ß.” *Geoff.* iii. 56. He says, “ Usitatissimi sunt ad urinam promovendam, &c.”

B A C C Æ B E R B E R I S.

S E C T. I.

Berberis, Oxyacantha Galeni. *off.* Berberis dumetorum. *B. P.* 454. *T.* 614. *R. H.* 1605. *Syn.* 465. Berberis. *Park.* 1559. Berberis vulgo, quæ & oxyacantha putata. *J. B.* 1. 2. 52. Spina acida; sive oxyacantha. *Dod.* 750. *Ger.* 1325. Crespinus. *Matth.* 150. *Cæs.* 99. Berberis, spinis triplicibus. *H. Cliff.* 122. The Barberry or Pipperidge-Bush.

It grows wild, on chalky hills, especially in England, flowering in May. The fruit is ripe in October. The berries, and the bark (or liber) are used. The oxyacantha Dioscoridis (l. 1. c. 122. p. 62.) is the oxyacanthus Galeni simpl. l. 8. p. 57. D. But oxyacantha Galeni (Vid. de Aliment. facult. l. 2. c. 58. fol. 24. B.) the Berberis. “ Crespinus Matthioli oxyacantha Dioscoridis non est sed Galeni; cum non solum fructus, sed & folia sunt acida, ejus nomine

“ nomine ad ciborum condituram usurpata: spina appendix Plinii (l. 24. c. 13.)
 “ Arabum est Amirberis fructu longo acido, non autem rotundo: unde depravata voce officinis dicitur Berberis.” *Baub. in Matth.* p. 152. “ Quam officinæ cum Averroe vocant Berberin, illam Serapio & Avicenna appellant Amirberberin, aut Amirbarin, nomine adhuc in oriente usurpato. Itali vocant spinam sanctam cruciatam Christi, quod vulgus putet coronam Servatoris fuisse inde. Sed verisimilior est sententia de Paliuro. Sed quid apud Græcos est? Fortassis oxyacantha Galeni non Dioscoridis dicunt. Mihi & inanis distinctio; & res ipsa est falsa. Et hoc satis est.” *Hoffman.* 126.

S E C T. II.

It is an acid, antiseptic and subastringent, like acetosæ folia; called stomachic by some, cordial by others; and is commended in hot, bilious; and inflammatory diseases, as ardent and pestilential fevers, vomitings, fluxes, hæmorrhages, &c. The inner bark is an attenuating diuretic and cathartic deobstruent; and commended in obstructions in the viscera, especially the jaundice.

“ *Officin.* Fructus (nomine Berberis) collecti autumnno. Refrigerant & humectant 2. partium tenuium, astringunt, appetitum excitant, roborant ventriculum ac epar. Proin usus sunt frequentissimi in morbis ubi refrigeratione ac astrictione opus, quales diarrhœa, dysenteria. *Præp.* 1. Conditi fructus. 2. Succus liquidus, ex recentibus baccis expressus. 3. Syrupus de succo Berberum. 4. Rotulæ, ex succo & saccharo. 5. Trochisci. 6. Rob de Berberibus compositum.” *Schrod.* 546.

1. The berries are very acid and somewhat astringent to the taste, but have no scent: the leaves also are sour and styptic; yet the inner bark is not acid, scarcely astringent, but nauseously bitter. “ Folia sapore acido; flores odore gravi; baccæ sapore acido & astringente.” *J. B.* “ Arbustum totum est saporis acidi austeri, grati, præcipue fructus.” *Nucl. Belg.* p. 42. The root is yellow, very bitter, and reddens very little the blue paper: the juice reddens it as (briskly, or as) much as alum does. This plant analysed gives a great quantity of acid liquors, little urinous spirit, pretty much oil and earth. The fruit is chiefly used. . . The bark of the root is astringent and deterfive.” *T. list.* p. 398.—2. “ Analyti ex succi fructuum Berberis expressi lbv. prodierunt humorum lbiv. 3xj. 3j. gr. viij. olei 3j. carbonis 3ij. 3v. gr. xlvij. unde cinerum 3i. 3ij. gr. xlvij. ac inde salis fixi alcali 3ij. gr. vj. (ergo terræ 3i. gr. xlij.) & jactura fuit xix. gr. xvi.” secundum *Geoff.* iii. 173. “ Vis cardiaca & alexipharmaca ipsis tribuitur.” *Ibid.* p. 174.—3. The berries are much commended and used in Egypt in ardent and pestilential fevers; the salutary effects whereof Alpinus, and after him Sim. Paulli, &c. experienced. “ Berberis fructus in medicinæ usu valde frequentant, quos putant cor multum roborare, viresque rescire, ac perfrigerare, stimulare, que extinguere, in febribusque ardentibus atque pestilentibus iis paratis uti solent. Horum siquidem libram in vase magno aqua pleno, vel duodecim etiam aquæ libras continente, mittunt cum nonnullis seminibus sceniculi, vel frustra panis, atque per noctem vel diem sic manere volunt, deinceps
 “ que

“ que de frigida hac expressione, per colum transfusa, cum saccharo multo
 “ rosaceo, vel simplici, vel syrupo acido citri large ægrotis propinant, qua
 “ potione calorem febrilem sitimque extinguunt, viresque reficiunt, atque
 “ etiam putredini prævalide obstant. Præstantissimum auxilium ad alvi
 “ fluxiones apud eam gentem sua astrictione habetur, eoque potu ego olim
 “ ibi pestifera febre correptus, cum immoderata diarrhœa biliosa, libentissime
 “ felici cum successu, Ægyptiorum medicorum consilio, sum usus.” *Alpin.*
Med. Aeg. l. 4: c. 1. fol. 117. b. See also *Sim. Paulli. Q. B.* p. 104. who
 used syr. Berb. aqua dilutus. “ Acida minus conveniunt illis quorum ventri-
 “ culus cibos tardius concoquit, tum ob caloris aut potius spirituum defectum
 “ in hujus visceris succo; tum ob ejusdem succi tenacitatem, quam acida sem-
 “ per augent.” *Geoff.* iii. 175. *Male!*—4. The bark is used in dying yellow.
 “ Corticis interioris lutei (quo tinctorum etiam utuntur) pulverem in aphthis
 “ puerorum laudat Camerarius in aceto mediocriter acri. *Hoffman.* p. 126.
 “ Cortex interior flavus, tam ramorum quam radicum, vel in cervisia aliove
 “ liquore decoctus, vel potius in vino albo aut Hispanico infusus, & potus,
 “ experientia nostra, in ictero remedium est præstantissimum.” *R. H.* 1605.
 “ Præter multiplices facultates Berberis, hoc secretum ab amico recipiebam:
 “ vinum album tenue, in quo medianus cortex, qui inter extimum & ligno
 “ adhærentem est, lineo panniculo involutus, per trium horarum spatium ma-
 “ ceratus fuerit, mirifice, si bibatur, purgare.” *Clus. H.* 121. *In what dose?*

The berries may be used any way. The gelatina fere ad libitum. It is ex-
 cellent for acidulating ptisans &c. in acutis, &c. “ Fructuum succus ex-
 “ pressus & defæcatus ad ʒj. propinatur.” *Geoff.* iii. 174. where you have *Sim.*
Paulli's way of preparing the essential salt (called by him tartar) succi Berberis:
 which is transcribed also in *R. H.*

N. B. The syrupus mororum, & fructus rubi Idæi, are in the *Pb. Lond.*
Novæ; and the gelatina rubescentium (which well enough supplies their place)
 in the *Pb. Edinb.* But the gelatina Berberorum (potius Berberum) *hujus* is a
 more powerful acid than any of them; so is preferable in some cases, and
 much safer than mineral acids.

B A C C Æ J U N I P E R I N Æ.

S E C T. I.

Juniperus. offic. *Juniperus vulgaris fruticosa.* *B. P.* 488. *T.* 588. *Juniperus.* *Dod.* 852. *Ger.* 1372. *Juniperus vulgaris.* *Park.* 1028. *Juniperus vulgaris, baccis parvis, purpureis.* *J. B.* i. 2. 293. *R. H.* 1411. *Syn.* 444. *Juniperus foliis undique prominentibus, pungentibus, fœmina.* *Fl. Lap.* 300. *Juniperus foliis sessilibus, patentissimis, fœmina.* *H. Cliff.* 464. The common Juniper.

This is common on heaths. It is a shrubby, low, and slow-growing bush, even when defended from cattle. Its berries do not ripen under two years. The flowering plant is barren. “ Cæsalpinus recte scripsit, Juniperum quæ
 “ fructum fert non florere. Quod & veteribus observatum. Nam referente
 “ Theophrasto, & ex eo Plinio, quidam Juniperorum duo genera tradunt,

Vol. H.

L 1

“ alterum

“alterum florere nec fructum ferre; quæ vero non florent, ferre protinus, baccis subnascentibus, quæ biennio hæreant. . . Fructus, notante Cæsalpino, maturefcit anno secundo, ut aliquando fructus trium annorum contineantur, cum is, qui maturus est, fervetur ad tertii anni fructum nascentem.” *R. H.* In other countries, as Spain, Italy, &c. it grows to a large tree; for *Juniperus vulgaris* arbor. *B. P.* is not a different species. The berries, rofine, and sometimes the wood, are used. “*Officin.* Lignum, baccæ, gummi, fungus.” *Schrod.* 609. “*Ufu.* Lignum, baccæ, & gummi.” *Dale* 280. *Pharm. Edinb.* “*Juniperi baccæ.*” *Pharm. Lond.*

The baccæ and lignum need no description. Gummi Juniperinum, sandaracha Arabum, vernix. *offic.* is a hard, brittle, clean, semipellucid rosin, of a pale yellow colour, resinous taste, and pretty fragrant smell, when heated or burning. It is brought from the Levant.

“*Juniperi arbor* Maio mense, cum pluviosa fuerit tempestas, luteam e cortice sudat lachrymam, quæ magna in copia, tanquam fungi exigui, arbori adhæret, nec magnopere odorata est.” *R. H.* 1412. “They get by incision from the trunk of the oxycedrus a very clear and transparent gum, which is the true sandarac, but rarely to be seen in France, to which is substituted the gummi Juniperi.” *Savary's Diæt.* ii. 946. *Lem. Diæt.* p. 285. & 566. Gum sandarache comes from Saphis and St. Croix in the kingdom of Fez and Morocco, and from Sayde in upper Egypt, to Marseilles, from twenty-five to thirty quintals per annum.” *Savary's Diæt.* iii. 559. The cedrus Lycia is but a species Juniperi. *Dale* 281.

“Lignum vix sentit vetustatem, & carbones dat tantum non æternum vi-ventes. Chymistæ, tradente Matthiolo, asseverant, carbonem Juniperinum accensum, ac suo cinere obrutum ignem integro anno fovere. Trabes Juniperinæ fuerunt in *Templo Dianæ, Sagunti* (now *Morviedro* in *Valentia*) cui, religione inductus, Annibal pepercit, ut est apud Plinium.” *R. H.* 1412. *Hoffman* 269.

It is generally believed to be the *ἀρκευθος* & *Juniperus* of the Ancients, (though *Dioscorides's* description, l. i. c. 103. p. 55. does not well agree to it) on account of what may be found in *Theophrastus* concerning it. *Vid. J. B.* i. 2. 292. *Bodæum in Theoph.* p. 195. & alibi. “*Juniperus, quod juniores & novellos fructus pariat, antiquis maturescentibus.*” *B. P.* *Canit. Virgilius, Ecl.* 10. v. 75.

“*Surgamus; solet esse gravis cantantibus umbra:*

“*Juniperi gravis umbra: nocent & frugibus umbræ.*

“*Baccarum vires fusæ traduntur a Scharffio de Junipero, & Joan. Michaeli de eadem.*” *R. H.* 1412.—*Benjamin Scharffius*, (*ἀρχαιολογία*, seu *Juniperi descriptio curiosa, variis medicamentis, observationibusque referta.* Jenæ 1679. in 8°. *Linden, Lipsiæ* 1672. in 8°.) *Seguier, B. B.* and several others, have written on this plant.

S E C T. II.

The fruit is an antiseptic, attenuant and somewhat deterfive, diaphoretic, diuretic, and carminative; called cephalic, pectoral, stomachic, uterine, alexipharmic,

pharmic, lithontriptic, &c. and commended in coughs, consumptions, flatulent and nephritic colics, gravel, dropsy, mensibus obstructis, hysteric fits, scurvy, scabies, &c. The lignum is said to be as good a sudorific in the lues Gallica as the guaiacum; and to purify contagious air, if burnt. The vernix is made diuretic and anodyne; and dissolved in oleo lini is a good ointment for the hæmorrhoids, burnings, &c.

“ Lignum calidum ac siccum est 3. suaveolet, unde & rasura ejus non sine causa in cucuphis adhibetur, quippe cephalicum est, nervosumque genus insigniter roborat.

“ Baccæ calfaciunt 3. siccant 2. discutunt, incidunt, attenuant. Usus præcipui in cienda urina, sudore, obstructis mensibus, obstructo liene, in affectibus capitis, nervorum, pectoris (tussi), in morbis a flatu (ut colica), in mucilagine renum & vesicæ, &c. Suffitus usitatissimus est tempore pestis, tum e baccis, tum e ramusculis suscitatus. Colliguntur baccæ sole virg. existente.—Gummi calfacit & siccant 1. (al. 2.) condensat, discutit. Usus præcipui in nervorum affectibus, resolutione frigidity, contractura, &c. convenit & in capitis affectibus reliquis a frigidity subortis. Fungus Maio mense instar musci adnascitur. Inservit aquæ ophthalmicæ. *Præp.* 1. Aquæ, ex baccis. 2. Spiritus, ex baccis fermentatis. 3. Oleum stillat. e baccis. 4. Oleum, ex ligno. 5. Sal, ex cineribus. 6. Rob Juniperinum. Mel Juniperinum. Theriaca Germanorum. 7. Extractum gummosum, ex ligno cum cortice. 8. Extractum e baccis siccis. Dosis ʒj. ʒij. Utrumque extractum excellens est sudorificum & bezoarticum adversus epilepsias, pestes, & affectus alios contagiosos & venenatos. 9. Elixir Juniperinum, admirandum virum in calculo. Dosis cochl. 1.” *Schred.* 609.

1. The berries are of a sweetish subacid resinous and bitterish taste, and somewhat aromatic or balsamic smell. “ Baccæ, sapore acri, resinoso, cum quadam dulcedine, tactu quoque ubi inveterarint, oleoso & glutinoso.”

J. B. “ Saporis dulcis & pinguis aromatici, sicut & odoris.” *Nucl. Belg.* 153.

“ Sapore acri, aromatico, resinoso, dulci.” *Geoff.* iii. 633. 2. All the parts of the plant contain a balsam, or resinous oil, somewhat like turpentine, but softer, which also gives the urine a violet smell. “ Vim diureticam in Juni-

“ peri baccis, earumque oleo (inquit Cargillus) in me expertus sum sæpius manifestam, & tum ex illis paucis devoratis, tum panem hujus guttula

“ tinctum, evidenter violarum odore urinas imbuere, non secus ac terebinthi-

“ nam vulgarem, ejusque oleum stillatitium.” *R. H.* 1412.—3. Analysis chymica, ex baccarum Juniperi maturarum & contusarum lbv. prodierunt humo-

rum lbij. ʒv. ʒj. gr. xvij. olei ʒix. ʒij. gr. iij. (whereof were olei essent. ʒij. gr. xlvij.) carbonis ʒxx. ʒβ. unde cinerum ʒij. gr. lx. ac inde salis fixi alcali ʒiv. gr. xxxvij. & jactura fuit ʒxij. ʒvi. gr. xv. secundum *Geoff.* iii. 633.

“ Baccarum contus. lbvj. per biduum in aquæ lbxxxvj. maceratæ, destillatæ,

“ præbuerunt olei essentialis ʒvij. extracti lbj. ʒβ. & residui exsiccati lbiv. ʒxiv. ex quibus olei essentialis ʒvij. (is this right?) Olei vero crassi ʒvi. ʒj. gr. liv. distillata sunt.” *Geoff.* iii. 634. Hence, if the quantities here be right,

the extractum lbj. ʒβ contained olei ʒij. ʒv. gr. xl. He says there also, ligni Juniperi lbv yielded olei essentialis circiter ʒβ, & olei spissi ʒix, (that is only twenty-seven grains less of thick oil, but more than quintuple the essential oil got from baccarum lbv.); and that summit. viridium lbv gave olei fluidi tum

limpidi, tum rufi ꝑviiij. ziiij. gr. iij. Yet he adds, “Baccæ itaque majorem olei quantitatem fundunt, lignum minorem, minorem adhuc folia & summitates.” Hence the accuracy of these analyses is to be suspected, though they are of little consequence. But—4. However much they are commended in the stone and gravel, they ought, as all stimulating diuretics, to be cautiously used in these diseases.

“Lapponii baccarum Juniperi decoctiones bibunt, quemadmodum coavæ & theæ. Suntque præcipua apud illos medicinæ pars. *Schefferus Hist. Laplandiæ.*” *R.H.* 1412. This *Linnaeus* positively denies: but he says the Swedes, in several provinces, make an excellent cerevisia of Juniper berries. *Vid. Fl. Lap.* p. 301.

S E C T. III.

They may be used many ways: some eat them to several drachms at a time. The essential oil may be given to gut. x. The berries are used in the aqua petroselinii composita, tinctura jalapæ composita, elixir salutis; and the oil is in the pilulæ ecphrasticæ and pilulæ de gambogia.

“Baccæ ad ʒj. præscribuntur per diem identidem esitandæ, vel contusæ in aqua bulliente theæ instar macerantur. . . . Ex baccarum lbviiij. in aquæ lbxxiv. maceratis & destillatis olei essentialis ʒiiij. ad summum prodibunt. . . . Sumitur ad guttas aliquot. . . . Rob ad ʒj. exhibetur.” *Geoff.* iii. 635. &c. “The oleum Juniperi is usually prescribed in colics, and pains from the stone and gravel, from gut. 1. ad v. or vi.” *Quincy Pharm.* p. 367.

L E C T U R E LXIII.

B A C C Æ L A U R E O L Æ.

S E C T. I.

1. **L** Aureola. *offic.* Laureola sempervirens, flore viridi, quibusdam Laureola mas. *B. P.* 462. Laureola. *Dod.* 365. *Ger.* 1404. *Park.* 205. *R.H.* 1587. *Syn.* 465. Laureola sempervirens, flore luteolo, *J. B.* i. 564. Thymelæa Lauri folio, sempervirens; seu Laureola mas. *T.* 595. Daphnoides. *Cæs.* 150. Daphne floribus racemosis, lateralibus, foliis lanceolatis integris. *H. Cliff.* 147. Dwarf-Laurel, or Spurge-Laurel.

2. Mezereon, Chamælæa. *offic.* Laureola folio deciduo, flore purpureo; officinis Laureola fœminina. *B. P.* 462. Laureola, folio deciduo; sive Mezereon Germanicum. *J. B.* i. 566. Chamælæa Germanica. *Dod.* 364. Chamælæa Germanica, sive Mezereon. *Ger.* 1402. *R.H.* 1587. Chamælæa Germanica, sive Mezereon vulgo. *Park.* 201. Thymelæa Lauri folio deciduo; sive Laureola fœminina. *T.* 595. Daphne, floribus sessilibus, infra folia elliptico-lanceolata. *Fl. Lap.* 105. *H. Cliff.* 147. Mezereon, or Spurge-Olive.

3. Thymelæa. *offic.* Thymelæa foliis lini. *B. P.* 463. *T.* 594. Thymelæa *Clus.* *H.* 87. *Ger.* 1403. *Park.* 201. *R.H.* 1588. Thymelæa Monsperiaca. *J. B.* i. 591. Spurge-Flax, or Mountain Widow-waile.

The first grows in woods and hedges in England, flowering in February; the berries are ripe in April. The second in Germany; flowering in February and March, as is commonly said: but I have seen it in flower in the end of November, and so it continues till the month of March or so. Vid. *J. B.* The third grows in South-France, Spain, &c. flowering in July and August.

“*Officin.* Mezerei cortex, folia, & grana, cocci Snidii, seu grana gnidia dicta.” *Schrod.* 770. who has neither of the other two. “*Ufu.* Laureolæ & mezerei, cortex, folia, baccæ. Thymelææ baccæ grana gnidia dicta.” *Dale* 313. “Laureolæ folia, baccæ: mezerei radix, cortex, baccæ: thymelææ, baccæ, grana Cnidia.” *Pharm. Edinb.* The *London M. M.* justly rejects them all. “Harum omnium (viz. the above three) fructus & semina grana Cnidia, seu cocci Cnidii dicuntur.” *Cod. Medic.* p. cxvii. 2.

“Ratio nominis chamelæa manifesta est. Thymelæam dictam volunt, quod oleæ ferat folia, & tithymali instar alvum solvat, quasi tithymelæam: certe tum foliis, tum qualitate tithymalum refert.” *R. H.* Vid. *Dioscorid.* l. 4. c. 172 & 173. p. 312. & *Plin.* l. 13. c. 21. p. 334.

S E C T. II.

These berries are all violent and dangerous cathartics and emetics, inflaming the stomach and guts: so that they are not used here. Every part of these plants is as bad as the berries, and perhaps even worse than the spurges.

“Mezerei vis est ignea, acerrima, exulcerans, mordens, febres accendens, cordis principumque partium vires exolvens; validissime bilem, biliofasque ferositates purgans. Corrigitur macerando hor. 24. in aceto, succo mali Punici aut Cydonii, portulacæ, mucilagine sem. psyllii. Dosis foliorum & corticum, optime præparatorum & correctorum (sine correctione exulare debent) à gr. viij. ad xv. N. ob malignitatem rarissime in usum venit. *Præpar.* Pilulæ de Mezereo. Videfis apud Augustan.” *Schrod.* 770.

1. They are all of a burning hot taste, inflaming the mouth for a long time, and smell somewhat disagreeably; tho' the Mezereon flowers have a very sweet scent. “Laureolæ fœminæ & folia & fructus parum degustati fauces totas inflammant; exterius impositi, vesicas excitant non minus quam euphorbium, cujus instar in multis habet, quemadmodum & in purgando. Reservatur soli hydropi.” *Hoffman* 39. “Cavendum, monet Camerarius, ne quis vescatur radice (thymelææ) quia paucis horis perimit. Cocco Cnidia vis ardens & fauces adurens. Unde miramur perdices & aviculas, thymelææ baccis avidissime vesci.” *R. H.*—2. In Sweden they poison wolves and foxes with Mezereon seeds. “Semina ejus in cadaveribus abscondita, exhibentur a rusticis Sueciæ lupis & vulpibus, quibus adsumpris, pereunt sine mora, æque ac a seminibus strychni (i. e. nuce vomica)” *Linnaeus Fl. Lap.* 105.—3. “Analyti chymica ex foliorum Laureolæ maris recentium lbv. prodierunt lbiv 3iij. gr. vij. olei 3ij. 3vij. gr. xlv. carbonis 3vij. 3vij. gr. ix. unde cinerum 3ij. 3ij. gr. liv. ac inde salis fixi alcali 3iij. gr. ij. (ergo terræ 3i. 3vii. gr. lii.) & jactura fuit 3iv. 3vi. gr. xi.” secundum *Geoff.* iii. 693.

BACCÆ LAURI.

S E C T. I.

Laurus. offic. *Laurus vulgaris.* *B. P.* 460. *T.* 597. *Laurus. Dod.* 849. *Ger.* 1407. *Park.* par. 598. *J. B.* i. 409. *R. H.* 1688. *Laurus minor. Park.* 1488. *Laurus foliis lanceolatis, venosis, perennantibus, (corollis quadrifidis,) mas & fœmina. H. Cliff.* 155. The common Bay-tree, or true Laurel.

It grows spontaneously in Spain, Italy, &c. and we have it in our gardens, where it flowers in April or May; but is always barren, the fruit growing on a separate plant. The fruit and leaves are used. *Vid. Lin. Gen. Pl.* p. 174.

The baccæ are small oval nuts, containing, under a thin blackish skin, a dicotyledon kernel, of a subacrid, oily, aromatic and bitterish taste, and fragrant smell.

Laurus is said by some to be originally Greek; others derive it from *lavo*, others from *laudo*. It is *δαφνη* in Greek, and the fruit *δαφνιδες*. *Dioscorides* (l. i. c. 106. p. 57.) does not describe it. But several characters of it are noticed by *Theophrastus*, particularly its diversity of sexes, *hist.* l. 3. c. 8. p. 141. “*Daphnen Ladonis filiam famosissimam fuisse poetæ fabulantur, quam cum Apollo deperiret, & ut potiretur, celeri cursu fugienti instaret, ab eo tandem capta, matrem tellurem precatur ut in sinum se suum reciperet. Votis ac precibus Tellus excitata confestim arborem edidit. Re conspecta deterritus Apollo; arborem gentili nomine donavit, & vulso ramo sese coronavit.*” *B. P.* Hence *Ovid. Met.* i. V. 557.

“*Cui Deus. At quoniam conjux mea non potes esse,
Arbor eris certe dixit mea: semper habebunt
Te coma, te citharæ, te nostræ Laure pharetræ.
Tu ducibus Latiis aderis, cum læta triumphum
Vox canet, & longæ visent capitolia pompæ.
Postibus augustis eadem fidissima custos
Ante foris stabis; mediamque tuebere quercum.
Utque meum intonsis caput est juvenile capillis,
Tu quoque perpetuos semper gere frondis honores.*”

This is a very aromatic genus, the cinnamomum, camphora, benzoe, *sassafras* being species of it, according to *Linnaeus*.

S E C T. II.

They are attenuant, diaphoretic, diuretic, and carminative; called alexipharmic, nervine, stomachic; and commended internally in malignant fevers, pallsies, flatulent and nephritic colics, obstructis mensibus, grindings, &c. and externally as anodyne and discutient.

“*Folia & baccæ calfaciunt & siccant 3. (baccæ paulo calidiores sunt) emolliunt resolvunt. Usus præcip.* (baccarum) in mensibus & urinis ciendis, affectibus nervorum, paralyfi, in colica, in dolore post partum, in crudibus ventriculi. Extrinsecus conferunt folia ad ictus vesparum, molliunt tumores,

“ tumores, promovent menſes (in ſuffitu ac balneo), leniunt dolores, odontalgiamque mitigant (gargar.) *Præp.* 1. Eleſtuarium de baccis Lauri. 2. Emplaſtrum. 3. Oleum Laurinum. 4. Oleum ſtillat. Diſcutit inſigniter ſtatus ac ventofitates, præcipue in ſpaſmo gravidarum, ut & in colica: ſiderata membra illitu reſtituit, auribus inditum dolores compoſcit, auditumque confortat, delet impetigines & quaſcunque faciei maculas. Denique ichorofiſ capitiſ ulceribus medetur phthiriaſin & tineas curat. Doſis gr. ij. iij. iv. 5. Spiritus. 6. Eſſentia.” *Schrod.* 613.

1. The leaves are acrid, aromatic, and bitteriſh, and very odoriferous: the fruit is very oily. “ *Foliorum ſapor acer aromaticus & ſubamarus: nucleuſ fructuſ cum aliqua acrimonia, amarus ac pinguiſ.*” *J.B.* “ *Baccæ ſaporis acriſ, amari, aromatici, oleoſi; odoris non ingrati.*” *Dale* 330. “ *Saporis amari, valde acriſ, & calidi, odoris aromatici. Folia ſunt ſaporis acriſ, calidi, & parum amari, odoris aromatici.*” *Nucl. Belg.* 169. “ *Lauri folia odorata ſunt, ſaporem obtinent acrem, aromaticum, ſubaſtringentem, cum quodam amarore. Baccæ vero pluſ odoris & ſaporis habent.*” *Geoff.* iii. 697.—2. Analyſi chymica ex foliorum Lauri recentium *ſlv.* prodierunt humorum *ſliij.* *ſxv.* gr. *xliij.* olei *ſiv.* *zvi.* gr. *xxiv.* carboniſ *ſvij.* *zviſ.* unde cinerum *ſj.* *zv.* gr. *lxiv.* ac inde ſaliſ fixi alcali *zv.* gr. *iv.* (ergo terræ *ſj.* gr. *lx.*) & jaſtufa ſuit *ſiv.* *zij.* gr. *xlii.* ſecundum *Geoff.* iii. 696. 3. Many virtues are attributed to this plant. Vid. *J.B.* who has ten pages on it: of which more than five are concerning its uſes and virtues; among which are its uſe againſt thunder, againſt the rubigo ſegetum, in triumphs, victories, &c. In *R.H.* there is more than one page of its *vires*: from which Mr. Geoffroy borrows a great deal without naming him, as is common with him.—4. The leaves partake of the virtues of the fruit, but are leſs oily; and perhaps ſomewhat aſtringent.

S E C T. III.

They may be given in ſubſtance to *zj.* in infuſion to *zij.* The oleum Laurinum is uſed externally as a warm diſcutient and anodyne. There is ſtill in our Pharmacopœia an eleſtuarium e baccis Lauri: though it ſhould rather be called *El. e foliis Rutæ*, as it ſtands now, more than one half of the ingredients being left out; yea and as it has in it zinziber conditum, and the ol. ſœniculi not in the former; and the proportions of what remain are altered; to ſay nothing of the excipient. *Is this medicine improved?* The eleſtuarium e baccis Lauri of the New London Diſpenſatory conſiſts of eight ingredients, nine that were in the old one being omitted, and none added. “ *Remark.* This (eleſtuary) is greatly contracted from the form of the preceding Pharmacopœiaſ. See the Narrative of the Committee, p. 111.” *Pemb. Diſp.* p. 334. “ *The number of ingredients in Eleſtuarium e baccis Lauri, being much too redundant, is now leſſened.*” *Narr. Commit.* l. c. A notable remark, and as notable a reaſon for the alteration. May not this be reckoned redundant by others, eſpecially ſince fol. rutæ ſiccata and ſem. petroſellini can add little to the virtue of the compoſition. I wiſh they had informed us by what rule redundancy is to be determined. Vid. *Sydenham de Podagra.* “ *Their principal uſe is in carminative clyſters.*” *New Diſp.* p. 476. Surely the Edinburgh one was never deſigned for the anus.

B. A C C Æ

BACCÆ MYRTI.

S E C T. I.

Myrtus. offic. *Myrtus communis Italica.* *B. P.* 468. *T.* 640. *R. H.* 1502. *Myrtus. Cæs.* 127. *Myrtus vulgaris sylvestris.* *J. B.* i. 510. *Myrtus Bætica sylvestris.* *Ger.* 1412. *Park.* 1454. *Myrtus floribus solitariis, calyce fructus diphylo.* *H. Cliff.* 184. The common Myrtle.

It grows wild in South-France, Spain, Italy, &c. flowering in June and July: it is also in our gardens, but seldom flowers there before August. The berries are used, and no matter of what myrtle they are. "*Officin.* Folia, "baccæ (myrtilli officinarum myrta)." *Schrod.* 632. "*Ufu.* Folia & baccæ (myrtilli offic.)" *Dale* 294. "Baccæ." *Pharm. Edinb.* But the leaves are as good; and these we may have fresh and good here, which can seldom be said of the berries.

Baccæ Myrti or Myrtæ *offic.* are about the bigness of juniper berries, somewhat oval, with a small crown on the top, containing, within a black skin, hard seeds shaped like a kidney; of an astringent scarcely aromatic taste; and no smell as we get them.

"*Myrtus & Murtus Latinis, Græcis μυρσίνη & μυρτινη nominatur, a Myr-*
" *sine Atheniensi puella, pulchritudine & robore insigni, amica Palladi, quam*
" *juvenis, ab ea cursu & palæstra superatus, interemit, invidia ductus quod*
" *elegantia cæterisque naturæ dotibus, reliquis virginibus præstaret. Arbus-*
" *cula in demortuæ locum successit, semper Minervæ ut olea chara. Græ-*
" *cum ei nomen remanet ut Plinius, l. 15. c. 29. scribit, quo peregrinum esse*
" *appearat.*" *Vid. B. P.* Canit *Virgil, Ecl.* 7. v. 61.

"*Populus Alcidæ gratissima, vitis Jaccho,*
" *Formosæ Murtus Veneri, sua Laurea Phœbo;*
" *Phyllis amat Corylos; illas dum Phyllis amabit,*
" *Nec Myrtus vincet Corylos, nec Laurea Phœbi.*

Dioscorides does not describe the *μυρσίνη*, but is long enough on its virtues, *l. i. c. 155. p. 77.* and his *l. i. c. 48.* is de (*μυρσινελαις*) oleo myrtino.

S E C T. II.

They are astringent; called stomachic; and commended in fevers accompanied with a diarrhœa, &c. and outwardly for spongy gums, &c. like the cortex granatorum, and may be used the same way.

"*Utraque refrigerant temperate, siccant valide, astringuntque. Usus in-*
" *ternus rarus est, nihilominus tamen adhibentur in fluxu alvi, ac expuitione*
" *sanguinis. Extrinsecus usus utriusque crebrior. Folia emendant foetorem*
" *sub axillis & inguinibus (pulvis aspersus): sudorem corporis immodicum sis-*
" *tunt (frictione): membris catarrhosis opitulatur, alvi fluxui succurrunt,*
" *defensivum exhibent in herpetibus, putredinem oris sanant, hæmorrhagiam*
" *narium sistunt, polypo medentur (cum melle ac vino). Baccæ mitigant*
" *oculorum*

“oculorum inflammationes, juvant luxatos articulos ac ossa fracta, subveniunt
 “procidentiæ uteri ac ani, capitis tineas, furfuraceaque excrementa abigunt.
 “*Præp.* 1. Syrupus Myrtillorum seu Myrtinus. 2. Oleum Myrtillorum. Ex
 “foliis Myrti & oleo communi infusis.” *Schrod.* 632.

1. The berries are astringent, and somewhat-vinous tasted while recent: the leaves are aromatic and fragrant, as well as astringent; so rather heat than cool. “Myrti Bœticæ fructus vinosus est, grati saporis, folia valde odorata.” *Clus. R. H.* “Baccæ Myrti saporis sunt subausteri.” *Nucl. Belg.* 204. But —2. They are little used here; the syrupus Myrtinus being omitted in the *Pharm. edit.* 1744.

C A C A O.

S E C T. I.

Cacao. offic. *Cacao. Clus. Ex.* 55. *T.* 660. *R. H.* 1670. *Sloani Cat.* 134. *Hist.* ii. 15. *Ger.* 1550. *Cacao, sive Cacavate. Park.* 1642. *Cacao Americæ, seu avellana Mexicana. J. B.* i. 291. *Amygdalis similis Guatimalensis. B. P.* 442. *Arbor cacavifera Americana, cujus fructus folliculo inclusus amygdalorum speciem refert. Pluk. Alm.* 40. *Theobroma, foliis integerrimis. H. Cliff.* 379. The Caco-tree.

It grows in several hot countries of America, and is also carefully cultivated. You have father Plumier’s description of it in Mr. *Geoffroy’s M. M.* ii. 410. and its botanical character in *Linnaei Gen. Plant.* p. 367. For the culture, crop, profits, &c. vid. *Savary’s Dict.* i. 500. and iii. 118. The seeds only, or nuts (called amandes, i. e. kernels, *Gall. malè,*) are used. According to Savary the profits of it are very considerable, twenty negroes sufficing for managing 50000 cacao-trees, which may yield *com. annis* 100000lb of amandes, worth $7\frac{1}{2}$ sols per pound, the lowest price they are sold at, which makes 37500 livres, or about 1875 l. sterling.

These nuts are about the bigness of almonds, but rounder and thicker, containing, within a brownish thin shell, a dark reddish brown kernel, consisting of several (five or six) unequal, closely joined, but easily separated, lobes, of an oily bitterish but not unpleasant taste, and soft smell.

The chocolata of which a drink is made, which is called by the natives of Mexico chocolate, is a paste made of the kernels per se, or with the addition of some other ingredients. Savary says this paste, used by the Indians, and by the Spaniards at first, consisted of cacao, mais, crude sugar, and a little Arnotto (or Orleana. Vid. *Dale* 338.) to improve its colour; and served equally both for meat and drink; eating it when hungry, and drinking it, sufficiently diluted with hot water, when troubled with thirst. That it is the liquor made of this paste, which the Mexicans call properly chocolate, if it be true that it is compounded of choco, signifying in their language sound or noise, and alte or atte, water, *quasi* a sounding-water, because of the noise made with the stick, in preparing the drink, or milling and frothing the chocolate. The Spaniards afterwards, and other Europeans, much augmented the number of ingredients in the chocolate, which, almost all except the vanelloes (without which, says he, it is impossible to make good chocolate) rather spoil than better its qualities. Vid. *Savary’s Dict.* i. 754.

Vanilia, Banilia. *offic. Dale* 340. Volubilis filiquosa Mexicana, foliis plantagineis. *R. H.* 1330. Volubilis Americana, capreolata, plantaginis foliis, filiquis longis, moschum Olentibus. *H. Ox.* iii. 613. Lobus oblongus, aromaticus. *Clus. Exot.* 72. *Cat. Jam.* 70. *Sloan Hist.* i. 180. Lobus aromaticus, subfuscus, terebinthi corniculis similis. *B. P.* 404. Lobus longus, aromaticus, odore fere Belzuini. *J. B.* 1, 2, 438. Vanilla, flore viridi & albo, fructu nigricante. *Plum. No. Gen.* 25. tab. 28. *Geoff.* ii. 362. Epidendri species. *Lin. Gen. Pl.* p. 436. Epidendrum, foliis ovato oblongis, nervosis, sessilibus, caulinis; cirrhis, spiralibus. *Roy Lugd.* 13. *Sp. Pl.* 952. Volubilis filiquosa, plantaginis folio. *Catesb. Car.* 3. p. 7. The vanelloes or banilas are dark brown flat pods, about six inches long, and half inch broad (scarce an inch broad. *Mil. Bot.* 75. "quatuor lineas lata. *Geoff.* rectius) full of very small black shining seeds, of an oily aromatic taste, and fragrant sweet smell, resembling benzoin or balsam of Peru much. It is brought from Jamaica, New Spain, and other parts of the West Indies. It is reckoned very cordial and carminative; but chiefly used for its flavour in chocolate. *Vid. R. H. and Geoff.* l. c.

"In Jamaica Cacao nuclei crasse contriti in panes, seu massas librales, aut bilibres, trilibresve efformantur absque ulla mixtura." *R. H.* 1672. who has more than three pages on this simple; on which many treatises have been written: about twenty-six are mentioned in *Sequierii Bib. Botanica*.

S E C T. II.

It is an antacid, incrassating, and nourishing substance; called stomachic and aphrodisiac; and commended for coughs, heat of urine, leanness, consumptions, &c. but more used for food than medicine.

"Virtutem amygdalarum, pinearum, & pistaciarum æmulantur; vim habent nutriendi adeo potentem, ut, ex quorundam sententia, carnibus omnibusque aliis alimentis sint anteposendi (hi nuclei). Vis omnis consistit in mucosa blanda & oleosa substantia, qua totus fructus scatet." *Herman. Cynof. Boecler.* p. 384. "Abundat oleo crasso & balsamico, unde bene nutrit, & humores acres inviscando temperat; conducit ad tussim & phthisim, stomachum roborat, & valet in morbis ubi opus est adstrictione." *Nucl. Belg.* 52.

1. They are very oily, farinaceous, and somewhat mucilaginous; neither acrid nor styptic. "Saporis subamari & subausteri." *Nucl. Belg.* "Subamari, & leviter acerbi, non ingrati tamen saporis." *Geoff.* ii. 409. "Saporis subpinguis oleosi, & subamari; odoris nullius." *Herm. Cynof.* l. c. *Dale* 328. "Nuclei probe curati, gustu subamari sunt, nec tamen ingrati & pingues seu oleosi, calore temperati; ut nonnullis videtur sicci & astringentes, quod non probat Hughesius, uti nec Piso. *R. H.* 1671. "Ex fructus Cacao contusi & calefacti lbj. olei ℥ij. exprimuntur: ex facie, postquam una cum aqua ebullit, olei crassioris ℥ij. ʒijß. prodierunt, ita ut summa olei, per expressionem extracta fuerit ʒv. ʒijß." *Vid. Geoff.* ii. 412. where he says also that fructus lbj. by means of boiling water, yielded of a pinguedo ʒix. ʒß. which turned hard and white like tallow.—2. According to Le Febure, &c. "Nucleorum Cacao non decorticatorum ʒviii. yielded of phlegm and spirit ℥ij. olei rubicundi, in frigore instar butyri ceræ crassescantis, ʒijß. carbonis ℥ij. ʒvij. reliqua materia in operatione assumpta." *R. H.* 1673.

Here

Here is no loss, but $\text{z}ij.$ too much. In the Bib. Pharm. it is spiritus $\text{z}j.$ only. "Si ex retorta debite destilletur, suppetit phlegma instar jusculi carnis; ac ejus spiritus & oleum redolet pinguedinem ex assata carne destillantem." *Herm. Cyn.* "Analyti chymica ex nucleorum Cacao crudorum & confusorum, testis rejectis, $\text{lb}ij.$ varii liquores utroque sale, acido & acri, permixti exierunt ad $\text{z}vj.$ circiter. Olei vero primum translucidi, dum calens est; dein consistentiæ butyraceæ, dum refrigeratur, rufescentis, sapore acri pungente, & odore subtili, $\text{z}xiv.$ Massa nigra in retorta remanens pendebat $\text{z}x.$ ex qua rite calcinata salis fixi salis ziv. extractæ fuerunt. Partium in destillatione absumptarum pondus fuit $\text{z}ij.$ " *Geoff. ii. 411.* According to Le Febure, &c. as quoted in *R. H.* "Oleum mirifice pungit & penetrat, estque valde aromaticum. Spiritus brevi acescit." Is Mr. Geoffroy's *Analysis made out of Mr. Ray's H?*—3. "Admodum refrigerat, ita ut aqua soluta frigida (or perhaps it should be *& frigida assumpta*) calefieri nequit intra duas horas in ventriculo; hinc non convenit nobis." *Albin. M. S.*—4. It is much commended by some, while others condemn the use of it almost all together. "Chocolata bona & rite parata, frigido ventriculo multum prodest, omnia viscera corroborat, unde phthisi caute adhibita sæpe medetur. Venerem valde proritat. . . . Novi virum qui phthisicus, & pene deploratus, ad chocolatæ usum se recipit: uxor etiam, ut viro complaceret, eandem bibit; miro utriusque successu. Nam vir brevi convaluit: mulierque prius effœta habita, ex eo gravida, filios peperit tergeminos, omnes vitales." *Mundy de potentis* (in his *βιοχημτολογία*, &c. *Oxonii* 1680. in 8vo.) cap. 13. p. 350. On the other hand it is said to breed obstructions in the viscera; being a glutinosum pingue; and instances given of its having had this effect seem to confirm this opinion. But *Spenius* judiciously determines the controversy, which take in his own words: "A chocolata abstinere debent juvenulæ chlorosi laborantes, alique omnes obstructionibus affecti. Ultimis hisce annis in hac urbe, apertum est cadaver cujusdam viri, qui nimium Chocolatæ indulgebat, in quo reperti sunt in fellis cystide, viginti saltem calculi, quos non immerito hujusce liberalioris potus soboles esse putarunt. Nihil hæc ipsi derogant. Moderatum usum (ut Hispanus doctor Marradon Chocolatæ minime amicus) improbare nolemus. Imo detrimentum quod aliquando adfert, probat invictè ejus emolumentum, ubi corpus in statu versatur opposito. Sic quia viscidis ac gypseis existentibus humoribus, non convenit, merito concludendum, ubi nimium fluidus & acris est sanguis, utilem fore, ipsius scilicet incrassatione & temperatione. Proindeque tussi importunæ, febri hæcticæ, diarrhææ, & similibus morbis curandis non imparem." *Bib. Pharm. i. 444.* Hence I think it more proper for the old than the young, (there are two very old men mentioned by Mangetus, l. c. who almost lived on it a long time); for hot than cold climates and constitutions; for the laborious than the sedentary; or, in a word, where the fibres are rigid, or juices acrid and volatile, than in opposite circumstances. How much its nature may be altered by the manner of preparing it, and the substances mixed with it, let others inquire; I am concerned only with the simple. An ounce of it with $\text{z}ß$ sacchari, and aquæ bullientis $\text{z}vj.$ or viij. well mulled, is, I think, a sufficient dose. "Hispani Chocolatam sumpturi, prius frigidæ haustum bibunt. Cum vero sumpserint, horam aut amplius a frigida abstinere. Mane com-

“modissime bibitur moderata dosi ad zv . aut vi. Sub horam somni sumptus
 “nocet.” *Mundy*, l. c. six ounces of whose chocolate (consisting of eight parts
 water, one part of the paste or massa, and half a part of sugar) will not con-
 tain zvss of the solid chocolate.

CARPOBALSAMUM. *Vide* Balsamum.

CARYOPHYLLI.

S E C T. I.

Caryophyllus. Carophylli aromatici. *off.* Caryophyllus aromaticus, fructu
 oblongo. *B. P.* 410. *T.* 661. *Breyn. prod.* ii. 25. *R. H.* 1508. Caryophyllus.
Clus. Exot. 16. *Lin. Gen. Pl.* 233. *H. Cliff.* 207. Caryophylli. *Park.* 1577.
 Caryophylli veri Clusii. *Ger.* 1535. Caryophylli Indici. *J. B.* 1423. The
 Clove-tree.

It grows in the Molucca islands. The unripe fruit, or rather florum calyces,
T. or fructus germina, seu embryones, are the Carophylli. *offic.* or cloves,
 which resemble thick short nails, somewhat flattened, with four little horns on
 the top, supporting a small round flower-bud, which easily falls off, of a dark
 brown colour, of a very hot spicy taste, and fragrant aromatic smell. When
 the cloves are left on the trees, they swell and become the fruit, and are then
 called antophylli, which (quod mirum) are neither so aromatic, nor so oily,
 as the cloves, therefore are not used.

The Dutch have long (*viz.* since 1638.) been intire masters of the clove
 trade; and from them all Europe is furnished. “This tree was formerly
 “very common in the Molucca islands, where the European nations, which
 “traded in spiceries, furnished themselves with what quantity of cloves they
 “wanted. At present it is found only in the island Ternate; the Dutch, jea-
 “lous of this commerce, and to become sole masters of it, having eradicated
 “all the clove-trees of the Moluccas, and transplanted them to Ternate: so that
 “whoever would have this useful commodity, are forced to take it through
 “their hands.” *Savary’s Diß.* ii. 231. He mentions what quantity of cloves
Tidor, *Motir*, *Mackiam*, and *Bachiam* furnish. *These* with *Ternate* are the
 Lesser *Moluccas*; of all which the *Dutch* are masters.

“Fructus qui καρυσφυλλον, sive καρυσφυλλος (i. e. nucifolium) dicitur, nec
 “Dioscorides nec Galenus meminisse videntur, licet Serapio Galenum falso
 “citet, forsan rectius Æginetam, vel Sethi nominaturus. Apud Plinium,
 “l. 12. c. 7. hæc leguntur, *est etiamnum in India piperis grani simile, quod vo-*
 “*catur Garyophyllum grandius fragiliusque*: verum hunc Plinii aliqui *καμακον*
 “Theophrasti, l. 9. hist. esse putant: Comacum, inquit, ex India & Arabia
 “deportatur; ad unguenta idoneum est.” *B. P.* Theophrastus’s words are,
 as rendered by *Bod.* l. c. “Cætera autem odorata, quorum in aromatibus
 “usus partim ex India advehuntur, ac inde mittuntur ad mare; partim ex
 “Arabia deportantur; ut cinnamomum & casia, atque etiam *καμακον*, cujus
 “genera duo; horum alterum fructus: alterum unguentis pretiosissimis ad-
 “miscere solent.” Vid. *Bod.* (in *Theoph.* p. 1009. 2.) who thinks the coma-

cum.

cum fructus is what we now call cubebæ, which in Java is still called cumuc. Vid. *Garc.* l. 1. c. 23. *Clus. Exot.* 184. However there is no reason to believe that our Caryophyllus is the Garyophyllum of Pliny, who adds to what is above cited, "Tradunt in Indico luco id gigni. Advehitur odoris gratia."

"Caryophyllon non pro nominis ratione etiam substantiam habet, quum folium nucis illo significetur verum ex India velut flores quidam arboris, festucarum speciem præferentes, nigri, digiti fere longitudine, afferuntur, aromatici & acres, subamari, calidique ac sicci circa tertium ordinem. Hi multiplicis usus sunt tum in obsoniis, tum in aliis medicamentis." *Paulus*, l. 7. p. 624. *H.* "Apud Serapionem Carunfel est Garyophyllus (ita enim scribit interpres) qui annotat cum Paulo, aliam esse ejus essentiam, quam nomen ipsum exprimat, quod folium nucis denotat. Adferri ex Indiæ locis similem flori suæ arboris, esse veluti lignea quædam frustilla, nigra, longitudine transversi digiti, odorifera, sapore acuto, cum quadam amaritudine. Paulum citat, eundemque eadem cum Galeno scripsisse de iis de verbo ad verbum. Sed locum eum apud Galenum nondum legimus. Apud Avicennam Garyophyllus (Charunful Bellun.) similis est sambuco, sed nigrior. Masculus est veluti olivæ nucleus, longior & nigrior: fructus arboris Indiæ." *J. B.* (i. 425.) who has near seven pages on it. Is it the *καρυοφυλλον* *Pauli*? This tree has never yet ornamented an European garden. "Ne per octo quidem dies vegeti in ædibus conservari possunt anthophylli; statim enim exsiccantur, nec unquam germinant." *R. H.* 1508.

S E C T. II.

Cloves are very stimulating and heating, diaphoretic and carminative; called cephalic, cordial, stomachic; and commended internally in the vertigo, lethargy, palsy, lipothymie, indigestion, vomiting; *verbo*, in all cold, phlegmatic, and flatulent diseases: and outwardly for the tooth-ach, paralytic members, &c. They are much used also in the kitchens; and to correct purgatives.

"Cardiacum, cephalicum, ac stomachicum, insigne exhibent; calfaciunt & siccant 3. discutunt. Hinc prosunt in lipothymia, odontalgia, cruditate ventriculi, vertigine; arcent quoque morbos malignos, uterinos, &c. *Præp.* 1. Confectio. 2. Aqua. 3. Oleum. 4. Extractum. 5. Sal com. ex remanentiis incineratis. 6. Balsamus. 7. Species diacaryophyllorum." *Schrod.* p. 558.

1. They are extremely hot, causing a pretty lasting and glowing heat in the mouth, which as it were agreeably benumbs the tongue a short time; and are among the most pleasant of the spiceries. "Sapor recentium fervidus, non sine amarore, valde tamen gratus & aromaticus (*Cordo* astringens quoque) & nescio quid stuporis linguæ imprimens." *R. H.* 1508. è *J. B.* "Saporis acris, amaricantis, & grati, odoris fragrantissimi. . . Adeo expetuntur & placent, ut sine Caryophyllis dapes fere despiciantur. Omnibus propemodum ferculis intinctibus, vinis aut spirituosus liquoribus potulentis aromaticis admiscuntur. Inter odoramenta quoque usurpantur." *Geoff.* ii. 390. "Odoris fortissimi, saporis acris, valde calidi, aromatici." *Nucl. Belg.* 65.—
2. They

2. They abound with an aromatic heavy oil, which discovers itself on the slightest bruise; and may be got by expression, as well as by distillation. "Caryophyl. lb̄i. yields, by a very simple distillatio *per descens.* albi olei ʒj. ʒij. & spiritus ʒj. the residuum being ʒxij. ʒij. whence some black oil may be obtained by an increased heat. The oil of cloves becomes red a few days after it is drawn. The spirit is red, of a pretty agreeable acid taste; and smells of cloves." Vid. *Lemery's Chym.* p. 599. But the common oleum Caryophyllorum is got by distilling them with water. "Mirabile interim oleum hoc generosissimum spiritibus, si orbi vitreolato, in aëre aperto, paulo calidiore, exponitur, tam brevi dimittere diffusos spiritus, totumque suo halitu vaporare locum, deinde autem in lentum, spissum, iners, pingue abire: quem tamen in regionis fervidissimæ æstuate æstate, spiritus illos arcte retineant, tanto temporis spatio." *Boerb. Chym.* ii. 116.—3. Outwardly they warm and comfort the parts; and are of use in paralyti linguæ, cold pains, &c. Mr. Geoffroy gives the principles, but no analysis: and borrows (*more suo*) much from *R. H.* unnamed. "Adversus omnes cerebri frigidos affectus, vertiginem, visus debilitatem, cephalalgiam, hypothymiam, cordis palpitationem, ventriculi imbecillitatem, impotentiam Veneream, mensium suppressionem, hystericos affectus commendantur. Aëris contagio resistunt, sive suffimento, sive esu." *Geoff.* ii. 392.

S E C T. III.

They may be given in substance to ʒj; in infusion to ʒj; the oleum stillatitium to gut. iv. in sugar, yolk of an egg, &c. This oil is an ingredient in the spiritus lavendulæ compositus, spiritus salinus aromaticus, syrupus de rhamno, pilulæ coccinæ, pilulæ de duobus, pilulæ Rudii, balsamum ad apoplecticos.

"The dose of the oil is gut. ij. or iij; of the spirit a gut. vi. ad xx." *Lem. Chym.* 599. "Oleum Caryophyllorum est stomachicum, corroborat & flatu discutit: antifebrile & antiparalyticum insuper egregium est. Dosis a gut. ij. ad x." *Le Mort. Col. Chym.* p. 327. "Dosis in substantia a gr. iij. ad ʒj. in infuso a ʒß. ad ʒij. Dosis olei intus sumpti est guttæ unius aut alterius." *Geoff.* ii. 392.

C A S S I A.

S E C T. I.

Cassia fistularis, Cassia solutiva, Cassia nigra, Siliqua Ægyptia. *offic.* Cassia fistula Alexandriana. *B. P.* 403. *T.* 619. *R. H.* 1746. Cassia nigra. *Dod.* 787. Cassia purgatrix. *J. B.* 1, 2, 416. Cassia fistula. *Ger.* 1431. Cassia solutiva, vulgaris. *Park.* 234. Cassia fistula, Chai-arxambar vocata. *Alp. Aeg.* 3. Cassia, foliolis quinque parium lanceolatis, extimis minoribus. *H. Cliff.* 158. The Pudding-pipe tree, or Purging Cassia.

It is a large tree, growing in both the Indies, Egypt, &c. The fruit, or rather pulpa fructus, only is used. The fruit is a (two or three feet) long, slender dark brown pod, containing, within an hard woody skin, or bark, in proper cells, shining brown seeds, surrounded with a black pulp, of a sweet subviscid taste, and soft smell. If the pulp is rough or astringent, the fruit has not been ripe enough; or if acid or dry, it is too old. "Pulpa tres notas habet, præ nigredine splendet, pinguis est, dulcis fere ut pruna, sed cum aromatica quadam acredine. . . Summa quæcunque Cassia cum dulcedine quadam, æqualiter afficit fauces, nullo modo mordicans, illa est bona." *Hoffman*, p. 17: "Uno verbo qui diu dulcis est, tamdiu securus est usus ipsius." *Ibid*.

"Cassia fistula ab Arabibus inventa est, & a recentioribus Græcis, ut actuario κασσία μελαινα nominatur. Fabam Indicam veterum, ut Aristoboli V. Cordus credidit. Siliquam Ægyptiacam Theophrasti i. hist. 18. nonnulli censent." *B.P.* It is described by Serapio, nomine Eiarxamber; and called by Avicenna, Chaiarlander. *J.B.*

S E C T. II.

It is a mild attenuating antiseptic; diuretic and purgative; called a cholagogue; also pectoral and nephritic; and commended in coughs, asthmas, gravel, gonorrhœa, &c. Children and pregnant women may safely take it.

"Medulla alvum lenit clementer, & sine torminibus fæces educit; caliditate & frigiditate temperata (*Fernel*: cal. 1.) cætera humidior; unde nec humido ventriculo, nec hypochondriacis & flatulentis, nisi stomachicis & carminativis (e. g. cinam. mastich. sem. anisi) correctæ, convenit. Potio ejus grata est pleuriticis. *Præp.* 1. Cassiæ flos seu pulpa, Cassia extracta. Dosis infantibus ad ʒiſs. adultis ad ʒiſs. in clysteribus ad ʒij. 2. Cassia extracta communis, sive pro clysteribus. 3. Electuarium diacassiae cum manna. 4. Cassia extracta sine sena. 5. Cassia extracta cum sena. 6. Extractum Cassiæ. 7. Aqua Cassiæ. 8. Syrupus de Cassia." *Schrod.* 758.

1. It is neither acrid, aromatic, nor nauseous; but sweet, subviscid, easily dissolving in water, and soon becoming sour. "Pulpa saporis est dulcis." *J.B.* "Saporis subacris & subdulcis." *Dale* 338: "Saporis dulcis, nauseosi & subacris." *Albin. M.S.* "Odoris vinosi, saporis saccharini." *Nucl. Belg.* 66. "Subdulcis, cum quadam acredine." *Geoff.* ii. 345.—2. Even the woody part of it is said to be cathartic. "In omni parte Cassiæ lignosa est robustior facultas evacuendi, quam in pulpa ipsa, quod ego expertus sum sæpe, & casu adinveni. Primis enim annis dum veni in hanc civitatem, habebam simias, marem scilicet & foeminam, & quidam ex meis domesticis acceperat pulpam Cassiæ, & domi relictæ sunt partes illæ lignosæ, quæ casu projectæ fuerunt in locum ubi erant simiæ, & ipsæ cœperunt partes illas lignosas comedere, & maximus in utraque alvi fluxus est excitatus. Ego existimans id factum esse ratione illarum fistularum, volui hoc experiri, & ita accepi fistulas lignosas Cassiæ sine pulpa, & facto pulvere exhibui, & reperi quod maxime evacuant: quod & alias sæpe expertus sum, & eo magis etiam solvunt si optime conterantur; & cum ipsis semina etiam illa. Ratione itaque ligno-

“farum partium & seminum, quæ non recipiuntur in flore Cassiæ, sit ut
 “Cassia tracta magis evacuet.” *Fallop. de Purg.* c. 35. p. 112.—3. “Analyfi
 “chymica ex pulpæ Cassiæ Alexandrinæ lbij. ʒvß. prodierunt humorum lbj.
 “ʒiv. ʒviß. Olei ʒiv. gr. xlvij. Carbonis ʒx. ʒiß. Unde cinerum ʒi. ʒv.
 “& inde salis fixi alcali ʒvj. gr. xij. (ergo terræ ʒvi. gr. lx.) ac jactura fuit
 “ʒivß. gr. xxiv.” secundum *Geoff.* ii. 347. But here the sum is only lbij.
 ʒiv. gr. lxxi. so that ʒj. ʒiij. gr. i. are wanting to make up the lbij. ʒvß.
 which were analysed. However Mr. G. well deserves to be read on this sim-
 ple; as he judiciously answers several objections made against it by some au-
 thors, such as its being hurtful to those who have been cut for the stone, or
 are troubled with heat of urine, to hysteric and melancholic persons, in bilious
 constitutions, &c. founded on false theory, and now justly disregarded.
 “Cassia facit ad calfactionem renum dicit Mesues, quoniam refrigerat: sed in
 “ardore vesicæ malum est medicamentum, quia diuretica est, & ideo deducit
 “ad vesicam arenulas, & materias falsas & acres, quæ augment ardorem, qui
 “quamdiu vis Cassiæ durat in corpore, tamdiu est molestior: verum est tamen
 “quod postea lenitur aliquantulum ardor.” *Fallop.* l. i. p. 113. “In calcu-
 “losis Ægyptii pro secreto habent cum saccharo candi, & pulv. glycyrr. sed
 “sola hoc facit. Monardis & Matthiolus pro infallibili preservativo habent ʒiij.
 “quotidie tribus horis ante prandium. . . Memini Ill. Saxoniam prolectione
 “dicere capitis dolores post cibum, non curari felicius quam Cassia post cibum.
 “Hoc postea inveni apud Helideum, qui curasse se ait hoc modo pertinacissi-
 “mam ophthalmiam.” *Hoffman.* p. 18. “Cassia catharticum est benignum
 “& innoxium, omni sexui, ætati, temperici, gravidis & puerperis conveniens.
 “. . . Utiliter præscribitur in febribus ardentibus & inflammatoriis, in affecti-
 “bus pectoris renum & vesicæ. . . . Præscribitur & in calculo . . . si aliqua
 “purgandi necessitas sub his morbis occurrat, nullo certe medicamento minus
 “noxio, felicius levabitur.” Thus *Geoff.* ii. 348.

S E C T. III.

It may be given to ʒij. It is an ingredient in the diacassia, and electuarius lenitivum.

“Cassiæ dosis est ʒß. ad ʒiß. Averrhoes dat a ʒx. ad ʒxv.” *Hoffman.* l. c.
 “Dosis medullæ Cassiæ a ʒij. ad ʒiß. decocta ab ʒß. ad ʒiv.” *Geoff.* l. c.
 “Quærit Vallisnerius, cur si damus Cassiæ pulpæ ʒxij. & si damus mannæ
 “ʒiv. equalem obtineamus lenitionem: & si damus Cassiæ ʒviij. & mannæ
 “ʒiij. vel iv. simul mixtas, duplicatam purgationem obtineamus? cum con-
 “trarium sequi deberet; nam plus possunt Cassiæ ʒiij. vel iv. quam mannæ
 “ʒiij. vel iv.” *Rieger.* ii. 568. The solution of this question is tedious; and
 resolved into the antipathy nature has to this tertium quid. *But I doubt of the*
fact.

C E R A S U S.

S E C T. I.

Cerasus, Cerasus nigra. *offic.* Cerasus major ac sylvestris, fructu subdulci nigro colore inficiente. *B. P.* 450. *T.* 626. *R. H.* 1538. Cerasus sylvestris, fructu nigro, *J. B.* i. 229. *R. Syn.* 463. Cerasus nigra. *Ger.* 1505. Cerasia nigra. *Tab. Ic.* 986. Cerasus. *Lin. G. Pl.* 215. Black Cherry-tree, or Mazzards.

It grows in woods; flowers in April; and the fruit (which is the only part used) is ripe in July, and called Cerasum, or Cerasium. “Cerasus, κερασος” *Theoph.* 3. hist. 13. Fructus κερασια, *Dioscoridi*, l. i. c. 157. Cerasia & Cerasa. Dicta autem a Cerasunte pontico municipio: unde Lucullus Romanorum Imperator, Mithridate debellato, primum in Italiam arborem detulit, & fructum gentilitio nomine Cerasium appellavit, *Athenæo*, l. 2. & *Plinio*, l. 15. c. 25. auctoribus.” *B. P.* 449. But *Theophrastus* lived about 250 years before *Lucullus*. Had the town Cerasus its name from the tree? quod Cerasis maxime abundet? So say Lexicographers. It is now called Cherafonda.

S E C T. II.

The pulp is an acescent diluent; so quenches thirst, resists putrefaction, and opens the belly: and is said to be stomachic. It is commended in obstructions in the hypochondriac viscera, putrid scurvies, &c. The nuclei or kernels are of the nature of bitter almonds; called cordial and cephalic, also lithontriptic: and are commended in the palsy, convulsions, epilepsy, gravel, &c. But they are suspected of virulency at present.

“*Officin.* Cerasa utriusque generis, i. e. subacida rubra (amarénæ) & dulcia nigra siccata: (nuclei, & gummi.) Acida refrigerant, siccant, astringunt, cor ac stomachum roborant. Hinc utilia in febrili situ ac æstu mitigando, &c. *Fernelius* decoctum Cerasorum in hypochondriaco affectu summe commendat. Dulcia temperata sunt ad humiditatem inclinantia, cephalica, unde morbis capitis, apoplexia, epilepsia, paralyti, &c. peculiariter proficua censeantur. Nuclei calculum comminuunt, adhibenturque contusi in frontalibus, unguentove refrigeranti commixti, ad dolores febriles capitis demulcendos faciunt. Gummi celebratur vi lithontriptica. *Præp.* 1. Condita acida. 2. Rob acidorum. 3. Syrupus acidorum. 4. Aqua stillat ex dulcibus. 5. Spiritus dulcium. 6. Aqua diuretica, ex nucleis utrorumque. 7. Tinctura & extractum, ex nigris. 8. Diamarenatum simplex, & compositum. 9. Oleum ex nucleis exprimi potest, sed est minus usuale.” *Schrod.* 560.

1. They are of a luscious sweet taste, with very little bitterness; and no smell: the kernel is more agreeable than bitter almonds, with the same flavour. “Fructus dulcis, nucleus amaricans.” *J. B.* “Fructus caro dulcis, aliquantisper amaricans, haud ingrata.” *Geoff.* iii. 291.—2. Eaten in too great plenty they, as most other fructus acido-dulces, frequently bring on diarrhœas,

perhaps rather by dissolving the juices than by fomenting or stimulating. Hence they are ranked by *Beerhaave* amongst the saponaceous acids: and so are of use in some obstructions of the viscera, and atrabiliarious diseases. “*Cerasia* bonam quidem alvum faciunt, si recentia ($\chi\lambda\omega\pi\alpha$) sumantur: at sicca eadem alvum sistunt. Gummi vero Cerasorum, cum vino diluto sumptum, diuturnæ tussi medetur; colorem quoque commendat, visum exacuit, & appetentiam invitat. Ex vino etiam potum calculosis prodest.” *Dioscor.* l. i. c. 157. totum.—3. The distilled water, which has its flavour only from the kernels, having neither taste nor smell without them, has been long much used in England; but is now excluded the London Dispensatory. “*Cerasa* dulcia in morbis capitis, epilepsia, apoplexia, paralyti proficua censentur. (*Riffus* apud *J. B.*) Dulcium nigrorum aquam stillatitiam a nonnullis ad epilepsiam mirifice commendari ait *J. B.* in ipso paroxysmo in os infusam. Dosis griv. aut amplius. Hæc valde celebratur, & apud matronas nostras frequenti in usu est ad motus convulsivos, præcipue infantium.” *R. H.* 1539. “The distilled water is of more use in the modern practice than any other simple water whatever.” *Miller’s Bot.* 128. See the reasons for banishing aqua Cerasorum nigrorum in *Pemb. Dispens. Narrative*, p. 76. There is such an affinity betwixt the taste of these kernels and bitter almonds, that I long ago suspected they were of the same nature. And now the effects of laurel-water have opened physicians eyes, and procured the proscription of both these waters. Vid. *Plinium*, l. 15. c. 25. p. 371. “Nonnulli ut minus noceant Cerasa, si ad satietatem edantur, officula una deglutire jubent. Verum nobis tentantibus id male cessit. Nam pluribus Cerasorum una cum pulpa officulis deglutitis, per aliquot post dies, gravitatem & dolorem sensimus in fundo ventriculi, ex officulis ibidem restantibus ortum; qui ægre, nec nisi plurimum dierum spatio, expulsi nucleis, sensim tandem evanuit.” *R. H.* 1540.

C O F F E E

S E C T. I.

Coffe. offic. Euonymo similis Ægyptiaca, fructu baccis lauri simili. *B. P.* 428. Bon, vel Ban arbor. *J. B.* i. 422. Bon. *Alp. Æg.* 63. *Vesling in Alpin.* 21. Buna. *Ger.* 1549. Bon arbor, cum fructu suo Buna. *Park.* 1622. Coffe frutex, ex cujus fructu fit potus. *R. H.* 1691. Jasminum Arabicum, castaneæ folio; flore albo odoratissimo; cujus fructus Coffe in officinis dicuntur. *Commel. Pl. Us.* 72. Bon. *Ind.* ii. 217. Coffea. *Lin. G. Pl.* 73. *H. Cliff.* 79. The Coffe-tree.

It grows in Arabia. “In Persia & Arabia felice succrescit.” *Dale* 317. “In Arabia felici & in Æthiopia frequens nascitur & colitur.” *Geoff.* ii. 433. “Crescit in sola Arabia felici, Witsenii cura, inde delatis seminibus, terræque commissis prodiit in Java, inde in Europam translata: nunc in America felicissimæ culturæ leges subit, frugemque læte reddit. Hæc est una è tribus istis mysteriosis plantis (nicotiana, thea, coffea) quas misericors vel iratus Deus proposuit orbi.” *H. Cliff.* 59. vid. *B. Ind.* ii. 217. where there is a fuller account of the introduction of this famous plant into Europe. Yet the year it came

came to Amsterdam is omitted. From thence *Lewis XIV.* in 1714. procured a plant "quinque pedes alta." *Geoff.* ii. 431. which was therefore at least five years old. This tree is described by Mr. Jussieu, *Mem. Acad.* 1713. in *H. Cliff.* l. c. and, from Jussieu, in *Geoff.* 432. Now it is every where well known. The fruit, or rather seed, is used, called coffe-berries.

How long the drink made of these seeds roasted has been used in Asia I cannot find; but it was not known in Europe, or little known there, before the middle of the 17th century. Yet so soon did the drinking Coffe generally prevail, that before the year 1688 there were imported to Marseilles, *com. annis*, from Arabia by Alexandria, between 5 and 6000 quintals of coffe-berries, valued from 65 to 70 livres per quintal. *Vid. Savary's Dict.* iii. 443. It is not the Buncho Avicennæ, or Bunca Rhafis, as Rauwolfius would have it: that was probably a root.

"Hoc semen fuit veteribus Græcis ignotum, Arabibusque apud quos nulla ejus mentio ante annum 1400 reperitur. Qui enim Bunchos esse Avicennæ existimant, nullis suam opinionem argumentis probare valent. Europæis vero nisi ab annis 60 circiter (i. e. before 1715.) non innotuit." *Geoff.* ii. 431. so that, according to him, it came to be known in Europe about the year 1655.

This now too common drink has employed the pens of I do not know how many authors. Seguierius in his *Bibl. Botanica* mentions above 30 of them. "Potus Coffe in Gallia dicitur innotuisse primum Massiliæ an. 1644. ab anno autem 1660. usum ejus publico invaluisse. Lutetiis vero in 1669 ubi nunc tabernæ fere 300: Londini fertur prima taberna anno 1652 instituta fuisse: & hodie earum ibi 3000 adeste dicuntur." *Vid. Rieger.* II. 365.

S E C T. II.

Coffee, as it is used, is diluent, anthypnotic, and narcotic; equally salutary or noxious as Tea, according to the circumstances of the drinker. "Coffa moderate sumpta eis qui sunt frigidæ constitutionis, & plenioris corporis habitus, sæpe prodest. Sed biliosis, melancholicis, & sanguine crasso præditis, minime convenit. Nam sanguinem particulis adustis vitiando, nutritionem impedit, spirituum meatus obstruit, & semen minuit; unde nonnullis istiusmodi nimius ejus usus paralyfin, aut Veneris impotentiam, attulisse observatur." *Mundy*, p. 352.

"Viscida dissolvit & ad urinam disponit, suppressos torpidosque spiritus suscitatur, & alacres ad obeunda munera reddit. Conducere videtur potius obesis & crassis pituitosis vel phlegmaticis, quam biliosis & macilentis, & quorum spiritus inquieti & nimis agiles. In Persia ustulantur cortices, seu tegumenta granorum. . . Raro cortices ad nos transferuntur, alias eorum infusum multo præstantius." *Herman. Cynos.* p. 324.

1. They are of a leguminous, subviscid, and somewhat bitterish and disagreeable taste, without smell. The pulp is viscous, sweetish and unpleasant. But the roasted berries are pretty bitter, have a peculiar flavour, and strong, penetrating, diffusive scent, which, when they are almost done enough, is perceived at a considerable distance. "Cortex levi quadam aciditate, nucleus

“evidente amaritudine linguæ sensum haud inclementer afficit.” *E. Vessingio*. *R. H.* “Nucleus saporis amaricantis & ingrati.” *J. B.* “Baccæ saporis farinacei, odoris fabarum tostarum instar.” *Dale* 317. “Cassæ fructus sunt substantiæ farinaceæ saporis leguminosi; uruntur ad usum, & sunt magis amari.” *Nucl. Belg.* 53. “Saporis farinacei leguminosi, odoris fere expers.” *Geoff.* ii. 431.—2. Coffe has been several times chymically analysed; but authors differ very much in the proportions of the substances it thus yields. (a) According to Dufour, as related in *R. H.* p. 1692. *lbj.* of good clean coffe yielded phlegmatis & spiritus *℥iv℥.* olei crassi *℥ij.* *℥v.* carbonis *℥iv.* which, added together, make *℥xj.* *℥j.* so that *℥iv.* *℥vj.* were lost or dissipated in the distillation. “Adæo ut quarta fere pars (says he) inter destillandum absumpta evanuerit, quamvis vasa exacte commissa, & cemento inducto clausa essent; argumento non inefficaci coavam multas particulas egregie volatiles & penetrativas in se continere, quibus ut verisimile est, somnum arcet.” But here *℥vij.* (more than a fourth part) are lost; and the cap. mort. afforded only salis fixi *℥℥.* (β) According to *Geoff.* 433. tom. ii. “Ex seminis Coffe *lbj.* prodierunt liquorum *℥vj.* *℥iv.* gr. *lvij.* olei spissioris *℥ij.* *℥vj.* gr. *xxij.* carbonis *℥ij.* *℥v.* gr. *xlviij.* unde cinerum *℥iv.* gr. *xxix.* ac inde salis fixi alcali *℥ij.* gr. *lxviij.* (ergo terræ *℥j.* gr. *xxxij.*) & jactura fuit *℥ij.* *℥vij.* gr. *xxvij.* (summa *lbj.* gr. *xij.*) (γ).” According to *P. Newman*, (as related in *Rieger’s* *Introd.* 2. p. 352.) “Coffe mundæ *lbj.* dedit spiritus *℥v.* *℥v℥.* olei *℥vj.* *℥℥.* carbonis *℥iv.* *℥ij.* ac inde salis fixi *℥ij.*” sum. *lbj.* so that nothing was lost. (*Not probable!*)

“Præter hanc analysim, altera quoque in academia regia sic instituta fuit:” says *Mr. Geoff.* ii. 434. Here he says, hujus seminis *lbij.* rite torrefactæ lost $\frac{2}{3}$ of their weight; and so were reduced to *lbj.* *℥iv.* which, powdered and boiled in aquæ *lb* 72. and the decoction poured off clear, and distilled B. V. yielded “Liquoris primum insipidi, dein subacidi & tandem acidi fortis *lb℥x.* *℥ix.* In alembice massa ad extracti solidi consistentiam redacto pendebat *℥xvij.* *℥ij.* quæ per retortam distillata præbuit liquoris acidi *℥v.* *℥j.* gr. *lx.* Liquoris alcalici, cum portione salis volatilis urinosi *℥ij.* *℥ij.* gr. *xxx.* olei crassioris consistentiæ *℥j.* *℥v.* gr. *xlj.* carbonis *℥iv.* *℥℥.* unde cinerum *℥j.* *℥ij.* ac inde salis alcali fixi cum odore & sapore sulphuris *℥vij.* gr. *lxx.* (ergo terræ *℥ij.* gr. *ii.*) & jactura fuit *℥ij.* *℥vi.* gr. *xlviij.* (here sum. *℥xvj.* *℥ij.*) Hujus tincturæ analysi patet seminis Coffe torrefacti *℥℥.* continere extracti spissioris *℥j.* gr. *lxviij.* salis acidi gr. *l.* circiter; salis vol. urinosi gr. *vij.*; olei gr. *xiii.*” (If there was extracti *℥xvij.* *℥ij.* Coffe torref. *℥℥.* contains of it *℥j.* gr. *lxvi.* if extracti only *℥xvj.* *℥ij.* the half ounce contains but *℥j.* gr. *lvj.* wherein are olei gr. *xij.* $\frac{1}{3}$ grani, and near salis fixi gr. *vij.* with terræ gr. *ij.* nearly; but how he calculates the acid and vol. alcali, I see not.) “Verum pulvis post decoctionem extractus, rite exsiccatus *℥xxij.* *℥vj.* tantummodo pendebat; & proinde pulveris tostæ *℥xij.* & amplius, in decocto solutæ fuerunt. Hujus pulveris instituta per retortam distillatione, transferunt liquoris *℥v.* *℥j.* gr. *xliv.* olei crassioris *℥vj.* *℥vij.* salis volatilis gr. *xxxviij.* Ex retorta extractæ fuerunt massæ nigræ *℥vi℥.* unde cinerum *℥iv.* gr. *xxiv.* ac inde salis fixi salis gr. *xxiv.* (ergo terræ *℥iv.*) & jactura fuit *℥v.* gr. *xxvj.* (sum *℥xxij.* *℥vj.*) Ex his analysibus concludi potest semen Coffe oleo potissimum crassiori empyreumatico, sed admodum rarefiscibili, & particulis ig-

“neis,

“neis, per torrefactionem imprægnato, cum portione salis volatilis urinosi non mediocri conjuncto, energiam suam debere.” Thus *Geoff.* ii. 434, 435. Granting all this, we only see the crude Coffe loses $\frac{1}{4}$ in roasting; and, roasted, another $\frac{1}{4}$ in boiling: and yet neither roasting nor boiling divests it of the greatest part of its oil and salts: and consequently what is thrown away, according to his conclusion, retains more of that to which it owes its energy, than the liquor that is drunk.—Mr. Gellard says, that two pullets fed, the one with roasted Coffe, the other with raw, became hectic both and died, the one on the eighth and the other on the twelfth day. *Vid. Mem. Ac. Roy.* 1746. —But 3. However much Coffe and Tea differ in taste, smell, consistence, and principles; yet their effects are much the same. “Sunt qui sorbitioni Cafe matutinae cibum aliquem præmittendum esse suadent, fundantes se in pronuntiato Turcarum dicentium, si nulla esca suppetat, quæ sorbitioni præmittatur aut jungatur, globum vestiarium ex toga deglutiendum, aut a potu abstinendum esse. Et certe multos a potu Cafe, jejuno stomacho sumpto, & usu ejus continuato, male se habuisse, emaciatosque fuisse constat. Novi ipse quendam, qui ab uno aut altero, minore quoque (poculo) potus Cafe, tempore matutino hausto, vertigine stomachica, unâ scotomia corripitur, quæ non cessat nisi assumpto cibo.” *Boecler. in Cynos. Herm.* p. 326. I myself found these effects of Coffe taken in the morning for breakfast, though I took plenty of milk, bread, and sugar with it: it affected not only the eyes, but the tongue also; and likewise caused a stupor in the fingers of the right hand; all which went off at dinner. It was in January 1740, and two hours after I took the Coffe before the scotomia began. I never since took a breakfast of Coffe, nor was ever vertiginous since. Hence there is something in Coffe as well as in Tea, which we may, I think, call narcotic, though it has not this effect on every one; and all its good effects are owing to the warm water and sugar, &c. taken with it.—4. *Dr. Willis, (Pharm. Ration.* p. 1. sect. 7. c. 3.) observes, that excessive Coffe-drinkers are commonly lean, paralytic, & ad Venerem impotentes. “Observavi multos, spirituum copia haud satis uberi præditos, ac insuper cephalalgia, vertigini, palpitationi cordis obnoxios, artuumque tremori, aut stupori, a potu Coffe ilico detentus habuisse, quoad istos affectus, & statim in toto corpore languorem insolitum persensisse.” *R. H.* However it certainly gives considerable relief in headachs after drinking, diverts from sleep, and may be of use in soporose diseases, and the gravel. “Quidam correptus est cholera atrocissima, convulsionibus valde dolorificis utriusque cruris stipata, ac ab hac interna causa exorta, quem brevissime & felicissime sanavi solo potu calido Coffæ copiose assumpto, qui retinebatur in ventriculo; tinctura opii, aqua menthæ, sero lactis, cervisia, vino, per vomitum rursus ejectis, & frustra usurpatis. E Muis podalirio redivivo.” *R. H.* 1692. *An a narcotica ejus qualitate?* Mr. Jussieu, l. c. says Coffe exhilarates, invigorates, and dissipates melancholy thoughts, as effectually as the nepenthes Homeri. *Who told him what the nepenthes was?* The French custom of taking a cup of Coffe immediately after dinner, which is now much followed by our people of quality and fashion, I think the safest way of using it: Coffe tostæ pulv. ʒj. is enough for aquæ lbij. it is certainly safer than the custom of taking drams of what they call surfeit waters. N. B. One ounce of Coffe is sufficient for a quart of water.

LECTURE LXIV.

COLOCYNTHIS.

SECT. I.

Colocynthis, Handel. *off.* Colocynthis fructu rotundo minor. *B. P.* 317. *T.* 108. Colocynthis. *Dod.* 665. *J. B.* ii. 232. *Ger.* 915. *R. H.* 642. *H. Ox.* ii. 27. Colocynthis vulgaris. *Park.* 160. Cucumis species est. *Lin. Gen. Pl.* p. 467. Coloquintida, or Bitter-Gourd.

It is a round, spongy, light, dry, white, substance, covered with a thin membrane, and full of oval flattish seeds, being the fruit of the bitter gourd (freed of its outward hard skin or shell) which is of the size and colour of an orange. This dried pulp, which is the only part used, is of a most bitter, acrid, and nauseous taste, with little or no smell.

It is brought from the Levant. "Affertur ex Ægypto." *Schrod.* 760. "Ex Aleppo adfertur." *Dale* 165. "All the world knows that the Colocynth is the fruit of a wild gourd, which grows in the Indies." *Bolduc Mem. Acad.* 1701. "It grows in Turkey, whence it is brought to us." *Miller's Bot.* 145. "Preceding 1688. there were (*com. an.*) imported to Marseilles from Cyprus (Chipres) between 80 and 100 quintals of Colocynth, valued from 60 to 70 livres the quintal; and consumed in France, England, Spain, Holland, Portugal, and Italy." *Carfueil, Savary's Dict.* iii. 455. "It is cultivated in several places of the Levant." *Lem. Dict.* 159. "Ex Aleppo affertur. . . Nascitur in insulis maris Ægei, & ora maritima orientali." *Geoff.* ii. 334. It is easily raised on a hot-bed, but I could never bring it farther than the flower. "The island Milo produces wheat, barley, cotton, melons, gourds, Coloquintida, &c." *Thomson's Travels*, p. 291.

"Colocynthis (κολοκυνθίς) aliis cucurbita sylvestris (κολοκυνθα αἴγος) aliis cucurbita amara (σικυαν πικραν), aliis cucurbita Alexandrina (κολοκυνθα Ἀλεξανδρινή), sarmenta foliaque emittit per terram strata, sativi cucumeris similia, incisuris divisa, fructum vero rotundum, mediocris pilæ magnitudine, vehementer amarum: quem legere oportet, cum cœperit ad pallidior-em colorem vergere. Fructus medulla purgandi vim habet, si ejus quatuor oboli ex aqua mulsa sumantur." *Dioscor.* l. 4. c. 178. p. 315. which agrees pretty well to our plant. Κολοκυνθίς ἀγρία is often in Hippocrates, also κολοκυνθη ἀγρία, ordered as a purger of water, pituite, and bile. It is thought to be the wild gourd mentioned 2 *King.* iv. 39. Dissentit *Celsius Hierob.* i. 393. "Colocynthis, *offic.* Σικυωνη & σικυωνης σπεργγον. Hippocratis: Haan-
"thal *Arabum*, Kandel *Serapionis.*" *Geoff.* ii. 334. "Qui confundunt (Colocynth.) cum τῷ σικυος, ignorantibus accensendi sunt: est enim cucumis. Eidem culpæ affines sunt, qui σικυωνην, & σικωνίαν, Colocynthide jungunt." *Hoffman.* p. 19.

SECT.

S E C T. II.

It is a very violent, irritating, and dangerous cathartic, apt to bring on superpurgations and other bad symptoms; called a phlegmagogue, said also to evacuate bilious and melancholic humours; and commended in inveterate head-achs, vertigoes, apoplexy, epilepsy, madness, asthma, dropsy, lues Gallica, lethargy, &c.

“Fructus medulla arida pituitam crassam ac glutinosam ex profundioribus
“ & remotioribus partibus expurgat, ut ex cerebro, nervis, juncturis, pul-
“ monibus; unde cum commodò exhibetur vertiginosis, hemicranicis, epi-
“ lepticis, apoplecticis, scabie & lue Venereæ afflictis. Calida est & sicca 3.
“ Verum ob vehementiam & amarorem, & quia ventriculo & intestinis noxia
“ est, rarissime in substantia, & non nisi robustis imò decenter correctis, ex-
“ hibetur. Corrigentia illa sunt cuminum, tragacantha, mastiche, bdellium,
“ & similia cardiaca, hepatica, stomachica. Dosis in substantia a gr. vii. ad
“ ʒj, in clysteribus (in petia) ad ʒß. *Præp.* 1. Trochisci Alhandal. 2. In-
“ fusum trochis. Alhan. spiritus vitæ aureus Rulandi nonnullis. 3. Ex-
“ tractum colocynthidis. N. B. Præstat cum aliis purgantibus miscere, ut
“ illis stimulo sit, quam solum exhibere. Dosis a gr. iv. ad x.” *Schrod.* 760:
Vires hæc è *Mesue*.

1. It is excessively bitter, very nauseous, and acrid. “Pulpa levissima,
“ amarissima, horrendo & ingenter amaro gustu, fauces, viscera, intestinaque
“ lædens, teste Lobelio.” *J. B.* “Saporis acris, amari, & nauseosi.” *Herman.*
Cyn. 333. “Saporis est amarissimi & intollerabilis.” *Nucl. Belg.* 85. “Sa-
“ pore intenso amaro, acri, nauseoso, fauces lædens.” *Geoff.* ii. 334. “The
“ kernel of the seeds is oily and of a sweet taste: the pulp is very nauseous,
“ acrimonious, and extremely bitter.” *Lewis's Disp.* p. 24—2. It contains
sulphureous as well as saline and mucilaginous parts; both of which are acrid,
but neither so efficaciously cathartic separately as when conjoined; both yield
their virtue to water. Pulpæ ʒviij. gave of extract by spirit of wine ʒß; and
the residuum by water ʒij. but the same quantity of pulp, extracted first with
water, afforded extracti solidi circiter ʒij. the residuum containing nothing dis-
solvable in sp. vini. vid. *Bolduc. Mem. Acad.* 1701: Where he says also, that
the spirituous water, distilled from the pulp well fermented with mustum, is
bitter and purgative; but without fermentation nothing rises but an insipid
useless phlegm by simple distillation. See *Quincy's* objection against the spiri-
tuous waters being purgative and bitter. *Pharm.* p. 180. “Aloe & colo-
“ cynthidis, fermentationem passæ amarorem amisisse Wedelio observantur.
“ *At. Lips.* 1686. p. 366.” *Boer. Chem.* ii. 184.—3. “Analyti chimica ex
“ pulpæ Colocynthidis, a feminibus separatæ, lbij. ʒvij. (= ʒxxxix.) prodie-
“ runt phlegmatis limpidi, insipidi & inodori ʒix. ʒviijß. (solutionem tum
“ sublimati turbidam fecit) liquoris empyreumatici, subusti, tum acidi, tum
“ urinosi ʒij. ʒiijß; spiritus urinosi ʒj. ʒviß. (so humorum ʒxv. ʒß.); olei
“ fœtidi, amari, acris, ʒij. gr. xij; carbonis insipidi ʒx. ʒivß. unde cinerum.
“ ʒiv. ʒiijß. ac inde salis fixi alcalini & caustici ʒij. gr. lx. (ergo terræ ʒij.
“ ʒvi. gr. xlvij.) & jactura circiter fuit ʒxij. ʒj.” secundum *Geoff.* ii. 335.

“ But the sum total is 3xl. 5vj. gr. xii. so that there are 3j. 3vj. gr. xij. too much. Here is an incredible jactura, and much earth; though Mr. Bolduc found nothing remarkable or singular in the analysis.—4. However acrid and irritating it be, it does not appear to be either corrosive or narcotic. “ Per
 “ decem dies macerato in aqua communi frigida malo Colocynthide, infusio-
 “ nem, quæ amarissima erat, percolavi, & quatuor in eam lumbricos im-
 “ merſi. Omnes intra quatuordecim horas interierunt. In eadem infusione,
 “ cui par aquæ copia addita est, alii lumbrici intra 24 horas extincti sunt.
 “ Nonnulli vero qui in hanc infusionem per duas horas immerſi fuerant, inde
 “ educti, & intra terram positi, ibi decem dies & amplius incolumes manse-
 “ runt.” *Redi de Animalculis, &c.* p. 161. Worms died in fifteen hours in
 an infusion of sena. *Ibid.* p. 162. but much sooner in several simple waters.
 Vide *Gramen*, supra. Hence it does not appear to be very anthelmintic.
 Hence also it differs much from cucumis asinus & helleborus.—5. Out-
 wardly applied it is said to purge. “ Est medicamentum viroſiſſimum, &
 “ tantum non mors ipsa, ut prophetarum filii clamant. Non tantum enim
 “ κακαστομαχον est, sed & abrasis intestinis dysenterias facit. Violentiam ip-
 “ sius vel hoc indicat, quod solo tactu & odore, abunde & cum magna per-
 “ turbatione alvum dejicit, quod experiuntur qui eam pinſunt aut alioquin
 “ tractant. Non tantum enim validissime concutit totius corporis habitum;
 “ sed exagitat etiam, vi sua malefica, omnia viscera, præsertim cor & hepar,
 “ quantumvis diligenter præparetur & corrigatur. . . . Non curamus graves
 “ morbos, quia nunquam expeditur nos a lenientibus. In his tamen malis,
 “ non subito oportet provolare ad Colocynthidis substantiam per os dandam.
 “ Quæ enim in imo ventre sunt, in iis fere sufficit inunctio umbilici, partium-
 “ que vicinarum. Ubi vero inunctio non præstat quod debet, clyſteres de-
 “ fectum suppleant. Post hæc antequam substantia detur, infusa vel decocta
 “ præsto sunt. Tandem substantia, sed bene correctæ. Ea vero valde operosa
 “ est. Prima & potissima consistit in exactissima pulverisatione. Nisi id fiat,
 “ partes quædam substantiæ, intestinis hærentes, & vasorum ora arrodentes,
 “ instar hirudinis sanguinem trahunt.” Vid. *Hoffman.* p. 20. § 8, 9, 10.
 “ Qui poma hæc manibus diutius tractant, aut in mortario terunt, hyper-
 “ catharſin inde contrahere solent, quod etiam fit sola inunctione ventris.”
Boecler. in Herm. Cynof. p. 335. Will it inflame and ulcerate the skin?—
 6. Dioscorides commends it in clysters for the sciatica, palsy, and colic; but
 says ἐστὶ δὲ κακὸ στομαχὸς λίαν. Mesue is much longer on its vires and noxæ.
 Schroder abridges him: and he is transcribed or followed by most authors.
 It is a violent cathartic; and so may have either good or bad effects, accord-
 ing to circumstances. Vid. *N. B.* p. 279.

Great noise has been made about correcting Colocynth. If its remaining
 in the primæ viæ, & irritating them is to be feared, the infusion, decoction,
 or extract, with water, wine, or brandy, may be used. If its acrimony is to
 be blunted, diminish the dose, and use it as a stimulus only: but salt of tar-
 tar and tartarus vitriolatus increase its acrimony. Fermenting it may injure it
 too much: for if lenitives or mild purgatives only are wanted, Colocynth
 should not be used. If you like Riverius's way of correcting it, it is both cheap
 and easy. “ Colocynthis ad cerebrum potenter expurgandum efficacissima est;
 “ sed summo amarore infensa est, vehementique illius est operatio. Corrigitur
 “ utrum-

“ utrumque infusione in urina, sic enim amaritudinem deponit, & fere insipidum remedium evadit, tum vehementia illius infringitur, ut ad 3j. tuto exhiberi valeat; sitque excellens ad omnes capitis morbos, a causa frigida oriundos remedium.” *Prax. l. i. c. 15. p. 191. a.* Urine seems to correct it only by extracting from it its most active parts. Would not water or wine do the same? Certainly.

The seeds are commonly thrown away, though perhaps not the worst part. “ Author semina ab usu removet, quæ tamen ab aliis mitiora habentur, & a quibusdam in ictero commendantur, præsertim si statim desuper aqua mulsa hauriatur. Sunt qui ad febres periodicas profligandas, semina pari numero pro amuleto de collo suspendunt.” *Boecl. in Herm. Cyn. p. 336.* “ Seminis non tanta virulentia ad purgandum, quam medullæ: dedimus namque multo majorem dosim quam medullæ, majore commodo, nullo aut longe minore tumultu.” *Lob. Adv. p. 287.*

S E C T. III.

The dose is commonly ʒj. in substance: though some give ʒß; while others do not exceed gr. x. vel xii. It is an ingredient in the pilulæ cochix, pilulæ de duobus, pilulæ rudii, & unguentum vermifugum.

The dose in Dioscorides is oboli iv. = ʒij. in Mesue (l. 2. Simpl. c. 4. p. 53.) a siliquis vj. ad x. = a ʒj. ad gr. xxxiv. — $\frac{1}{3}$ grani. “ Colocynthis dosis in substantia, ad ʒß. Riolo: a gr. vii. ad xv. Horstio & Heurnio: ad gr. xv. Sennerto: a gr. ij. ad xij. Rondeletio: a ʒj. ad ʒß. Fernelio & Duncano.” *S. Paulli Q. B. p. 579.* “ Dosis gr. vi. ʒß. ʒj.” *Bat. Pharm.* Pulpa in substantia exhibetur a gr. v. ad ʒj. in decocto vel infuso a ʒß. ad ʒi. sed raro propter amaritiem. In decocto pro enemate ad ʒj. vel etiam pro apoplectico a ʒiß. ad ʒij. decoctis & infusis sp. percolatis.” *Geoff. ii. 342.* who adds, “ Si nimia Colocynthis dosis exhibita fuerit ita ut hypercatharsis aut convulsiones superveniant, vel metuendæ sint; præcaveri possunt, vel curari, oleo tum affatim epoto, tum in intestina injecto.” But laudanum must sometimes be added; which, indeed, I have found successful when given alone.

C U B E B Æ.

S E C T. I.

Cubebæ. *offic.* Cubebæ vulgares, nec Arabum Cubebæ, nec Galeni Carpesium *Matthiolo. B. P. 412.* Cubebæ, *Garcix, Clus. Exot. 184.* Acoftæ. *Ibid. 268. J. B. ii. 190. Ger. 1548. Park. 1583. R. H. 1813.* “ An arbor baccifera Brasiliensis; fructu piper recipiente.” *R. H. 1593?* “ Arbor Bifnagarica, Myrti amplioribus foliis, per siccitatem nigris, Cubebæ sapore.” *Pluk. Phyt. 140. Almog. 43. Dale 316.* Cubebs.—These are small, round, wrinkled, brown grains, about the bigness of pepper, with a short stalk at one end; containing a round kernel, blackish without, whitish within, but sometimes empty broken shells; of an hot agreeable aromatic taste, and spicy smell; brought from Java.

"Cubebæ sunt fruticis convolvulacei *Javanensis*, curane dicti, grana rotunda, piperi similia, paulo majora, fusca, rugosa, scabra, cum appenso tenui pediculo caudæ instar, includentia, sub cortice tenui, nucleum parvum rotundum, foris nigricantem, intus albicantem; saporis aromatici potenter acris; odoris suavis." *Herman. Cynos.* 258. *Schroder, Lemery, Nucl. Belg. Miller*, make them rather less than pepper. It is a climbing plant according to *B. P. Lemery, Savary, &c.* "Est fructus racemosus arboris cujusdam malo vulgari similis, foliis vero piperis, sed angustioribus." *Schrod.* 575. which he seems to have taken from Jo. Hugo Linscotus, or Linschotanus; whose opinion Messrs. Ray and Dale favour. Vid. *J. B.* The plant that bears them is yet undescribed: it is not even certain that they are the Cubebæ, or Quabebe *Arabum*. "Planta quæ Cubebas gerit sarmentosa est, volubilis, & ad similem asperam accedens; a P. Hermanno Curane dicitur; a nullo hæctenus descripta." *Geoff.* ii. 376. Yet all are agreed that it grows in the island Java.

S E C T. II.

They are attenuant and carminative; said to be cephalic, cordial, and stomachic; and are commended in the vertigo, lethargy, palsy, colic, &c. also ad memoriam confortandam, & Venerem stimulantem.—They may be given in substance to ℥j. in infusion to ʒj. They are used in the aqua mirabilis, and theriaca *pro carpobals.*—"Calfaciunt 2. complete; siccant 3. complete; attenuant, discutiant, viscera omnia roborant, atque imprimis caput; adeoque plurimis inserviunt compositionibus. *Præp.* 1. Confectio. 2. Oleum stillat. rari usus est. 3. Species diacub." *Schrod.* 575.

They are very hot, aromatic, and cause a lasting glowing in the mouth. "Aliquando casta reperiuntur, æque efficaci, vel etiam efficaciori sapore prædita quam nucleata, suavi, aromatico, acri, sed qui piperis acrimoniæ multum cedat, pertinaci tamen." *J. B. R. H.* "Adeo penetrante acri & aromatico sale pollent, ut in ore volutata, faucium & linguæ poros aperire, & quasi dissolvere videantur." *Herman. Cynos.* p. 259. "Sapore prædita suavi, acri aromatico, sed qui piperis acrimoniæ multum cedat, pertinaci tamen, & copiosam salivam eliciente." *Geoff.* ii. 376. "Apud Indos Cubebæ in vino maceratarum est usus ad excitandam Venerem; tum etiam in Java ad excalfaciendum ventriculum." *Garcias.* And are used in phlegmatic and flatulent indispositions of the stomach and intestines.

"Dantur in substantia a gr. v. ad viij. in infuso ad ʒij. oleum destill. ad gut. ij. ad memoriam confortandum." *Herm.* l. c. "Dosis a ℥j. ad ʒß." *Albin. M. S.* "Dosis in substantia a gr. iij. ad ℥j. maceratarum in vino vel alio liquore idoneo a ʒj. ad ʒij." *Geoff.* ii. 377.

D A C T Y L U S.

S E C T. I.

Dactylus, Palmula. *offic.* Fructus est arboris quæ dicitur palma major. *B. P.* 506. *Roerb. Ind.* ii. 169. Palma. *J. B.* i. 351. *Dod.* 819. *Lob.* 637. *Ger.*

Ger. 1517. *R. H.* 1352. *Palmula vulgaris & legitima. Park.* 1546. *Palmula dactylifera*, seu *Dactylus vulgò. H. L.* 472. *Palmula dactylifera major, vulgaris. Jonst. Dend.* 138. *Sloane's Cat.* 174. *Hist.* ii. 111. Phoenix, frondibus pinnatis, foliolis alternis, ensiformibus, basi complicatis; petiolis compressis, dorso rotundatis. *H. Cliff.* 483. The common Palm-tree, or Date-tree.

It grows in Syria, Persia, Egypt, Arabia, Ethiopia, Barbary, Malabar, Ceylon, America, &c. "Provenit etiam in Arabia ad oram maris rubri; in Æthiopia Ægypto contermina, in Iudæa, ut circa Hiericho copiose, quæ idcirco in S. literis, (as *Deut.* xxxiv. 3. *Jud.* i. 16. &c.) urbs Palmarum dicitur. Idumæa a Palmarum copia poetis celebratur: Syria quoque, & Persia Palmis fructiferis abundant." *R. H.* 1354. This is a very famous tree both in antient and modern authors. Vid. *J. B.* i. 351. ad 371. *R. H.* 1351 ad 1355. The editors of Mr. *Geoff. M. M.* have inserted more than fourteen pages from *Kämpfer's Amen. Exot.* fasc. 5. Very curious indeed!

"Arbor quæ *φαινίξ* Græcis, Latinis Palma dicitur; fructus vero *δακτυλαί*, & *φαινίξες* Græcis, Latinis Palmulæ & Dactyli. . . Plinio, l. 13. c. 4. Palmæ genera unde quinquaginta sunt. . . Fructus Dactyli in Italia; Caryotæ (*καρυωτίδες*) vero Dioscoridi & Plinio. *Cæs.*" *B. P.* 506. For an accurate and very circumstantial description of this tree, and all its parts, with its culture and uses, I refer you to *Kämpfer*, or *Geoff.* ii. p. 291. ad p. 306.

S E C T. II.

Dates are antacid and nourishing; called pectoral and astringent; and commended in coughs, hoarseness, fluxes, heat of urine, &c. They may be used any way, & *ad libitum*. They are expelled the *London M. M.*

"Dactylorum maturorum pulpa calfacit, subastringit (immaturi astringunt fortiter) asperitatem faucium leniunt, fœtum in utero roborant, fluxus ventris sistunt, vitiis renum ac vesicæ succurrunt. Extrinsecus conveniunt in cataplasmatis astringentibus & similibus. N. B. Concoctu sunt difficiles, capiti dolorem inferunt (in primis exiccati) crassum ac melancholicum humorem generant. *Præp.* 1. Species, seu electuarium diaphœnicon *Fernelii.* 2. Diaphœnicum in solido, i. e. Tabellæ El. diaphœnic." *Schrod.* 640.

They are very sweet, and subviscid, without any acrimony or stypticity, and rather emollient than astringent, though the unripe fruit may be astringent. They are seldom prescribed here. "Palmulæ bene maturæ non nimium pingues ventriculo gratæ sunt, plurimum nutriunt, & corpus pingue faciunt: verum concoctu difficiles esse, & capitis dolorem inferre, medici veteres plerique omnes consentiunt. Unicus Aretæus omnia bellaria caput dolore infestare scribit, præter palmulas, ficus, & uvas." *R. H.* 1354. "Est acerbus atque astringens . . . recentes plus siccis astringunt, sed capitis dolorem afferunt, & copiosiores in cibo sumptæ inebriant." *Diosc.* l. 1. c. 148. p. 75. "Succum & viscidum gignunt, quo jecur, lien, aliaque viscera obstructionibus implicantur; & longiori eorum usu cachexia melancholica sensim inducitur." *Geoff.* ii. 306. *Inanis metus!* Though, if this be fact, it is no objection against the use of them. Vid. *Cacao*.

F I C U S.

S E C T. I.

Ficus, *Carica. offic.* *Ficus communis.* *B. P.* 457. *Ficus.* *J. B.* i. 128. *Ger.* 1510. *Dod.* 812. *R. H.* 1431. *Ficus fativa*, five vulgaris. *Park.* 1493. *Ficus fativa.* *T.* 662. *Ficus*, foliis palmatis (fœmina) *H. Cliff.* 471. The common Fig-tree.

It grows wild in South-France, Spain, Italy, &c. and is cultivated in many countries with great care, by means whereof it is much improved. Caprifigation, mentioned by *Theophrastus*, *Caus.* l. 2. c. 12. p. 246. and *Pliny*, l. 16. c. 27. p. 392. is still practised in *Cea*, or *Zia*, and other *Archipelago* islands. *Vid. Voyag.* Let. 8. p. 130. *Mem. Acad.* 1705. or *Geoff.* ii. 322. It bears its flowers within the fruit, which *Cordus*, *Hist.* 184. first observed; and has two crops of figs annually.

“ *Ficus arbor συκη* Græcis, & fructus *συκα* appellantur . . . *Plinius*, l. 15. c. 18. *Ficum* genera viginti novem proposuit. . . Primitiæ fructus, tam fativæ quam sylvestris, *δλυνθος*, Latinis grossus nominatur: ut *Ficus* in fur-
no, aut sole exsiccata, quæ quibusdam passæ dicuntur *ισχάδες*, Latine *Caricæ*, *καρικαι* *Æginetæ* quamvis *Carica Ficus* peculiaris species sit in Syria
provenientis, ut ex *Plinio* colligere est. Sic ipsa grana in fructu, Græci
κεγχραμίδας, frumenta *Plinius*, l. 15. c. 19. alii *Ficaria* vocant.” *B. P.* 456. It is *Carica*, not *Carica*, or *Caryca*; which last was a kind of condimentum.—*Carica* & *Caria*.

“ “ Hic nux, hic mista est rugosis *Carica* palmis,
“ Prunæque & in patulis redolentia mala canistris,
“ Et de purpureis collectæ vitibus uvæ.”

Ovid. Met. l. 8. v. 674.

“ The dried Figs come chiefly from Spain and Portugal, being first cured
“ by dipping them in scalding lye, made of the ashes of the cuttings of the
“ tree, and afterwards carefully drying them in the sun, they are put into
“ barrels or frails; and these are what are only used in medicine.” *Miller’s Bot.* 197. “ *Rustici* *Ægei insularum Ficus* per aliquot dies soli exponere so-
lent, deinde in clibano exsiccare, iisque pro alimento usatissimo cum pane
“ hordeaceo vescuntur. Attamen *Ficubus*, quæ in Gallo-Provincia, Italia &
“ Hispania exsiccantur, multo deteriores sunt; quandoquidem ex clibani ca-
lore saporem injucundum contrahant: igneus tamen calor necessario requiri-
tur ad ovula culicum interimenda, alioqui hi fructus brevi vermiculis scate-
rent & corrumperentur.” *Geoff.* ii. 323.

S E C T. II.

They are antacid and nourishing like dates, only reckoned more laxative; and are used the same way; and are internally commended in nephritic pains, measles, small-pox; and outwardly as emollient, maturating, and deterfive, for sore mouths, tumors, &c. in decoction, cataplasin, &c.

“ *Caricæ*

“ Caricæ calfaciunt 2. (recentes moderatius, utræque) humedant, pulmonaricæ sunt & bechicæ, arenulis renum & vesicæ medentur, venenis resistunt. Præcipui in usus sunt in variolis & morbillis ad cutem pellendis; maturant, molliunt, attrahunt, unde & bubonibus pestilentialibus (*immunte scriptura*) conferunt. Mulierculis nostratibus, appropinquante partu, Ficuum tostatum esus, ad partum facilitandum est familiarissimus. Quin & familiare est super Ficus sp. vini accendere, brodiumque ad tussim sedandam propinare.” *Sibrod. 590.*

1. It is a very sweet and subviscid fruit, neither acrid nor styptic, yet deterlive. “ Saporis dulcis, odoris debilis non ingrati. Acria quævis mulcent potius quam dactyli.” *Herm. Cynof. 393.* “ Ob lentorem manibus adhærescunt, & illas tamen abstergunt, salis lixivialis & nitri modo.” *J. B.*—
2. Externally they either discuss or suppurate tumors, according to their nature. Of them the most antient cataplasm on record was made, 2 *Kings* xx. 7. Hezekiah having died more than 260 years before Hippocrates was born.—
3. The unripe fruit, as the other parts of the plant, contains an acrid milky juice, commended for warts. Hence it differs from the palm-tree.—4. “ Ficuum frequentem esum pediculos generare, præter Galenum, Oribasius, Paulus & recentiorum quamplurimi, sibi persuasum habent. Quæ opinio & apud vulgus nostratum viget. An experientiæ suffragetur dubito.” *R. H. 1433* “ Observat tamen Athenæus, *Deipnosoph. l. 2.* Anchimolum & Mochum philosophos & rhetores in Elide, huic morbo non fuisse obnoxios, licet per totam vitam, aquam bibere, & Ficubus tantum vesci soliti fuerint. Addit tamen illorum sudorem adeo graviter oluisse, ut eos in balneis omnes averfarentur: unde S. Paulli monet illos qui hircum subalarem alent, ut a Ficuum esu abstineant.” *Geoff. ii. 325.* Vid. *Sim. Paulli Q. B. p. 299.* Mr. *Geoffrey* (ii. 325.) advises to drink abundantly after eating figs, “ ne in ventriculo subsistant, aut in intestinis; mora enim putrescunt, & febres putridas accendunt.” (Excess in recent figs, as other fruits, has proved pernicious to many, though from a very different cause.) “ Bilem fermentant & rarefaciunt, unde bilefcere dicuntur, sicut mel, saccharum, & cætera dulcia: quapropter biliosis minime conveniunt; & in febribus a bile exortis, aut in hepatis & lienis inflammationibus vitandæ sunt. . . Præscribuntur No. v. vel vi. pro singulis liquoris libris. Cavendum ne Caricæ, aut Dactyli, Jujubæ; Passulæ, Sebestenæ, nimia quantitate usurpentur in decoctis, ne viscidiora facta & spissiora, ventriculum gravent, nec facile urinarias vias permeent.” Here is a needless caution. Are not the substance of figs, &c. more viscid than any decoction of them? yet they are eaten safely in large quantities, even by children.

G A L L Æ.

S E C T. I.

Galla, Nux Galla. *offic.* Galls.—These are commonly known, and need no description. They grow on the

Quercus. offic. *Quercus*, cum longo pediculo. *B. P. 420. T. 583.* *Quercus. Tab. Ic. 962. Dod. 823.* *Quercus vulgaris longis pediculis. J. B. 1, 2,*

70. *R. H.* 1385. *Quercus vulgaris*. *Ger.* 1339. *Quercus latifolia*. *Park.* 1385. *R. Syn.* 440. *Quercus*, foliis annuis, oblongis, superne latoribus; sinibus acutioribus, angustis; angulis obtusis. *H. Cliff.* 448. The Common Oak.—This grows on woods, but no Galls are to be found on it in Britain: for though they grow (as they say) on every kind of oak, yet not in every country; but only in such as afford a proper climate for the insect that breeds, or rather is hatched in them. We see even here, on the leaves of several trees, excrescencies in which insects are hatched. The mother-insect wounds the part where she lays her egg, or communicates to it such a juice as alters the natural nourishment of the part, and forms a tumour which proves a proper nidus for the ovum. Such a nidus is the gall to an insect peculiar to warmer climates, which at length eats its way out and flies off: and hence it is that galls have commonly a hole in them; and if any want it, the insect may be found dead in them. The best galls come from the Levant, Smyrna, (which can furnish annually 10000 quintals) Aleppo, Tripoli: the Galscony and Provence galls are much inferior. For the different sorts of them see *Savary's Dict.* ii. 206. and for their structure, *Malpig. Anat. Plant.* p. 112. They grow on the leaves of the oak, according to *Herman* and *Albinus* MSS. On the slender branches, *Lemery's Dict.* p. 232. and *Clas. H.* p. 18. “Insecta hujus arboris gemmas, folia, furculos teneriores pungentes, humorem aliquem venenosum per vulnus instillant, qui tumorem præter naturam excitat. Forte etiam ova duntaxat venenato & fermentativo humore delibuta, nullo vulnere inflictio, ibidem deponunt, qui sufficit, contagio solo, succo nutritio alterando, & in motus irregulares compellendo.” *R. H.* 1389.

S E C T. II.

Galls are astringent; said to be febrifuge; and commended in fluxes and hæmorrhages, but little used internally. Externally they are commended for the tooth-ach, loose teeth, spongy gums, &c. but much more employed in dying and ink-making than in medicine. Dosis ad ʒj.

“Gallæ refrigerant ad recessum usque secundum, resiccant ad tertium, & potenter astringunt, partes laxiores contrahunt, imbecilles roborant, fluxiones cohibent, atque efficaciter ad astringenda aut siccanda quæ opus sunt, usurpantur, inquit Dioscorides, l. i. c. 147. Confer Ruellium de Natura Stirp. l. i. c. 83.” *Schrod.* Append. 10.

“*Quercus*. Folia, glandes, cortex, cupulæ glandium refrigerant, siccant, astringunt. Usus in fluxu alvi, uteri, feminis. Extrinsecus in odontalgia, profluvio uterino, &c. *Præp.* 1. Aqua stillat. ex foliis *Quercuum* novellarum, Maio collectis.” *Schrod.* 659.—

Galls, as every thing that comes of the oak, are styptic to the taste, and by every experiment strongly astringent.” “Sunt gustu astringente & acerbo.” *J. B.* “Saporis valde austeri.” *Nucl. Belg.* 121. “Saporis austeri, acerbi, & adstringentis.” *Dale* 275. “Gustu astringente & acerbo.” *Geoff.* ii. 779. Vide *Bistortam* supra.

“Analyfi chymica ex Gallarum Alepenſium probe exſiccatarum lbv. prodierunt humorum lbj. ʒxiv. ʒß; olei ʒij. ʒv. gr. liv; carbonis ʒxxviii. ʒv. gr. liv. unde

“ unde cinerum zij . gr. ij. & inde salis alcali zvij . gr. l. (ergo terræ zij . gr. xxiv :)
 “ ac jactura fuit lbj . zij ß. Per hanc analysim liquet Gallas multum sulphuris
 “ fixi & crassi continere cum sale ammoniacali conjuncti.” *Geoff.* ii. 780. He
 says also, “ Observandum Gallas vitrioli solutionem nigram vel potius intense
 “ violaceum efficere, dum nempe alcali sal Gallarum sali acido vitriolico con-
 “ jungitur, metallicas partes ab eo disjiciendo: tunc enim metallicæ particulæ
 “ liquoris fundum non petunt; sed cum sulphureis Gallarum particulis in
 “ fluido natantibus consociantur, & ab iisdem sustinentur.” But a solution
 of soap and of vitriol mixed is white; neither does a solution salis tartari be-
 come ink with vitriol. Moreover an infusion of galls with vitriol precipitates,
 unless gum be added. He adds, “ si salem vitriolicum, vel quid Martialis,
 “ aut Venerei, aquæ minerales continent, a Gallarum infuso vel decocto, ni-
 “ gro, violaceo, purpureo, vel subpurpurascente colore inficiuntur, prout
 “ plus vel minus salis metallici continent.” But Galls turn a solution of blue
 vitriol white like milk. Yet he makes his ink with no other vitriol but the
 vitriolum Hungaricum, which every where, as well as in his vol. i. p. 124.
 is blue vitriol. What sort of ink will this produce?

We have very many receipts for making ink. There is a treatise by *Petrus*
Maria Caneparius, de Atramentis cujuscunque generis, (opus sane novum, hac-
 tenus a nemine promulgatum, in sex descriptiones digestum :) Venetiis 1619
 & 1629. Londini 1660. & Roterodami 1718. in 4to. It is observed that
 the modern writings do not keep their colour so well as the antient. What
 I made by Mr. Ray's directions seems to answer the character he gives of it.
 “ Ex Gallis cum chalcantho, gummi & vino atramentum scriptorium opti-
 “ mum paratur hoc modo. R Gallarum ziv . chalcanthi zij . gummi Arabici
 “ zij . Gallas crassiuscule contritas in vini Gallici rubri (quod claretum nostrates
 “ vocant) sextariis duobus (a quart) infundas per novem dies, vas prope
 “ ignem collocando, & liquorem quotidie rudicula agitando aut commovendo.
 “ Deinde chalcanthum & gummi immittas, & cum unum amplius diem ste-
 “ terit, atramentum usui idoneum erit. Literæ hoc atramento exaratæ in
 “ charta, diuturnitate temporis colorem non mutabunt.” *R.H.* 1390. How-
 ever I must own, though it continues still black enough, it has lost a little of
 its bluishness in two years time, after writing. N. B. Ink should be exposed
 to the air as little as possible.

K E R M E S .

S E C T. I.

Kermes, Chermes, Grana Kermes, Coccus Caphica. *off.* Kermes-Berries.
 These are about the bigness of peas, of a brownish red colour, bitterish taste,
 and not unpleasant smell, found on the

Ilex aculeata cocciglandifera. *B.P.* 425. *T.* 583. *Ilex coccifera.* *J.B.* 1, 2,
 106. *Ger.* 1342. *R.H.* 1392. *Ilex minor coccigera.* *Dod.* 827. *Ilex aquifolia*,
 sive *coccigera.* *Park.* 1394. *Coccus infectoria.* *Lob.* 581. The Scarlet
 Oak.

On

On the trunk, branches, and leaves of this shrub in the month of March appear little points, half a line diameter, which in June arrive at their full magnitude, being about three lines diameter. They always yield a red liquor when bruised, and can be easily separated from the plant, without the least lacerating, or discovering any puncture or tuberosity in the part they adhered to, though viewed with a microscope. Vid. Mr. *Niffole*, *Mem. Acad.* 1714. It was the general opinion that it was an excrescence caused by a certain insect, and a nidus for its eggs. But, according to Mr. Reaumur, it is not a nest, but a real insect, of that kind which he calls Gall-insects. See his *Memoirs pour servir a l'Histoire des Insects*. Tom. iv. Mem. 1. or *Geoff.* ii. 783.

The Kermes is very plentiful on this shrub in the South of France: that of Languedoc passes for the best. Great quantities of the syrup of its pulp are made at Nantes and Montpellier, whence it is sent through all Europe in little barrels. Vid. *Savary*.—"Ilex coccigera . . . non ubique coccum gerit. " Nam iis solum regionibus quæ Mediterraneo mari vicinæ sunt, & magno " folis ardore torrentur, nasci animadvertēbam: sed neque istic perpetuo fert: " cum enim frutex adeo adolevit, ut glandem alere incipiat, coccum non gignit; ideoque solent incolæ quadriennes aut adultiores frutices urere, ut proximo anno novelli assurgant." *Clus. H.* p. 24. There is little of it used in dying since the use of cochineal was known, which gives a much brighter colour, though not so lasting.

It is called *κκκκκ βαφικκκ*, i. e. Coccum tincale, by *Dioscorides*, l. 4. c. 48. p. 260. Kermes by the Arabians, which name is now most common; and hence color kermesinus, and crimson.

S E C T. II.

It is probably attenuant and subastringent, at least antacid; called cordial; and commended in the palpitatio cordis, syncope, lowness of the spirits, diseases of the head, hard and difficult labour, as a remedy to prevent abortion, &c. But I not only doubt of these virtues, but suspect it contains some noxious or malignant quality.

"Cardiaca sunt grana, calefaciunt, & siccant, astringunt, vapores tetros discutunt, spiritus vitales reficiunt, parturientibus subveniunt, vulneratis nervis medentur, morbillos erumpere faciunt. *Præp.* 1. Confectio Alkermes. 2. Extractum seu essentia. N. B. Scarlatus pannus, granis hisce tinctus, admodum celebris est, adhibeturque non modo ad morbillos proliciendos (patientes in eum involvendo) sed & ad cor roborandum (epithemata eo suscepta cordis regioni imponendo) ut & ad bubones Venereos curandos (pannum iis imponendo). Quin & filo serico, hujus coloris, ad arcendum erysipelas, locum affectum circumligare, vulgo usitatissimum est." *Schrod.* 563.

It is pretty bitter, somewhat disagreeable, and scarcely subastringent to the taste; and of a weak aromatic smell. "Odoris debilis non ingrati, saporis subacris, amaricantis, & in recessu paullulum quoque adstringentis." *Cartheuser*, ii. p. 536. "Saporis, subacris, subamaricantis, odoris non ingrati." *Herm. Cynof.* p. 297. & *Geoff.* ii. 782. "Saporis subacris, amaricantis, odoris

“grati.” *Nucl. Belg.* 154. “Quomodo autem cor corroboraret & exhilaret, cum præter adstrictionem & amaritudinem nulla qualitas manifesta in ea percipiatur, nos fugit. Odorem quem senserunt fragrantissimum in vermiculis & granis ipsis Lacuna & Quinquernus inter præparandum, mirum cur alii aut non deprehenderint, aut non meminerint.” *R.H.* 1393.—2. I poured on gran. Kermes 3j. aquæ bullientis 3vj. When it had stood a day macerating it was of a pellucid deep crimson colour, bitter subastringent and nauseous taste, and fetidly musty smell. Oleum tartari gave it the colour of claret, but not an urinous scent: spirit of vitriol brought it to the colour tinct. croci, and precipitated a little of a saffron mucus: solutio vitrioli made it opaque and black, precipitating a good deal of greyish black sediment, leaving it green and transparent above: spirit of vitriol turned this mixture again pellucid and red, but paler than the infusion. Neither syrup of violets, nor solution of turnsole, made any observable change of colour. The residuum filtered and dried weighed gr. liij. so that water extracted thus no more than gr. vij. from gr. Kermes 3j. The remaining gr. liij. infused in alcohol vini 3xij. for some months, gave it a saffron tincture; and it lost of its weight gr. iv. only; there remaining of the Kermes, after all well dried, 9ij. gr. ix. Hence it appears to be subastringent. — 3. “Analysi chymica ex granorum Kermes recentium lbj. prodierunt non parum phlegmatis, primo odoris & saporis expertis, deinde empyreumatici (yielding some phlegm smelling like the berries, and some urinous spirit which does not alter the tinct. heliotropii, but changes the tincture of violets green) salis volatilis concreti 3vj. (of concrete volatile salt 3ß. and about 5j. or ij. more mixed with the oil); olei citrini aliquantulum; ac tandem olei spissioris, empyreumatici, portio non mediocris; quæ nullas acidi salis notas præbuerunt. Ex massa nigra superstita nihil salis fixi lixivio fuit extractum, ita ut ex animali profapia coccum illud oriundum videatur.” *Geoff. M. M.* ii. 788. A very lame analysis, which cannot much be depended on.——N. B. Mr. *Geoffroy* (*Mem. Acad.* 1714.) says that much thick fetid oil was extracted from the massa nigra, but mentions not any fixed salt. — 4. These grains are said to be very noxious to pigeons. “Garidellus, in Hist. Plant. Aquisextiensium, observat columbas grana Kermes avide expetere, suisque aggerere pullis; at vero escam illam eisdem esse infestam, ita ut Juniores intereant, vetustiores vero alvi profluvio rubro afficiantur. Ex qua quidem observatione non prorsus innoxium esse hoc granum concludere possemus, nisi contrarium frequentissimo illius usu, satis superque probaretur. Columbibus autem noxi-um esse potest, quod hominibus quibusdam in circumstantiis salutare com-peritur.” *Geoff.* ii. 790. But was a noxious substance never long and much used as a medicine? “Rondeletius archidiaconum Valentiae in dysenteriam ob nimium & frequentem usum confectionis Alkermes incidisse observavit.” *S. Paulli Q. B.* p. 69. This is attributed to the lapis lazuli; though there is but 3ij. of it (usti, loti, & præparati) in between confectionis lbij. & iv. — 5. It dyes a deep and lasting red. *Vid.* Rubia tinctorum. And—6. Is commended in many diseases. The antients used it only as astringent externally. “Vim habet stypticam vulneribus, nervisque fauciatis tritum ex aceto convenienter imponitur.” *Dioscorid.* l. c. We owe its reputation as a cordial to the Arabians. “Electarium ex granis tinctoriis, ad cordis palpitationem, syncopem, mentis alienationem seu desipientiam, mœrorem sine causa ma-

Vol. II. P p “nifesta.

" nifesta. Facultates enim nostrum corpus dispensantes mirifice roborat." *Mesue Grab.* l. i. fol. 89. or rather to more modern authors. For this electuary can have little from the Kermes. Vide ¶ infra. " Arabes primi ejus " virtutis cardiaci mentionem fecerunt. Mesues illud ad cordis palpitacionem, " syncopem, mentis alienationem & melancholiam commendavit." *Geoff.* ii. 788. But it is the electuary Mesue so commends; which later authors applying to the Kermes, they have not a little altered the composition. " Nunc " vero in difficili partu ad vires sustinendas, ad vomitum sedandum, & ven- " triculum roborandum, ejus pulvis plurimum celebratur. Mulieribus ad " abortum præcavendum feliciter exhiberi solet. Quin etiam prægnantes ab- " ortum metuentes, sericum cocco tinctum sæpe deglutunt." *Geoff.* l. c. Thus the dyed silk seems to be found as successful in preventing abortion as the grains, and the grains as effectually to facilitate delivery as to prevent abortion: and if so, I may infer neither has any effect in the one nor in the other. Mr. *Geoffroy* thinks otherwise. " Plurimas novi mulieres, quæ nun- " quam ad ultimum graviditatis terminum pervenerant sine abortu, & tan- " dem sequentium pilularum usu per novem menses absque ulla noxa fructum " suum gestaverunt, & vivacem prolem feliciter enixæ sunt. R. Granorum " Kermes recentium, confect. de hyacintho ana ʒj. ovorum germinum ex- " siccant. & pulveratorum ʒj. syrupi Kermesin. q. s. M. F. pilulæ ix. pro tri- " bus dosibus." *M. M.* ii. 788. See there his directions how to use them. They can scarce need the syrup, yet will be large pills. Now is it not probable, that if Kermes in a large dose be not hurtful, at least as it is used, it has little effect any way? " Quidam cardiacam virtutem cocco baphico de- " negant, solam adstrictionem ei concedentes. Verum si ad ejus analysim at- " tendere velint, intelligent sane tinctorium granum salibus volatilibus turgere, " ac proinde massæ sanguineæ spiritibus destitutæ actuosas partes posse sup- " peditare." *Id.* ii. 790. But if he had attended to what he observes on the analysis extracti lactucæ, he would not have said so. Besides, are volatile salts proper to prevent abortion? Does not every animal substance abound with them? But Kermes is also astringent. His analysis makes the whole animal: and I know no animal substance astringent: besides, it is too weak an astringent to do service in this case. But if its virtues depend on its astringency, there are hundreds of cheaper simples that may be justly preferred to it. " Partim ab- " stergendo, resolvendo, & discutiendo, partim stimulando atque subadstrin- " gendo in corpore operantur, suumque ideo locum quem hætenus inter ner- " vina, cephalica, cardiaca, stomachalia, diuretica, & aphrodisiaca occupa- " runt egregie omnino tumentur, &c." *Carth.* ii. p. 542. *Credat qui vult.*

S E C T. III.

Kermes is given in powder to ʒß; the syrup to ʒß; and confectio to ʒij. " Pulvis exhibetur a ʒß. ad ʒß; syrupus vero ab ʒß. ad ʒj." *Geoff.* ii. 788.

¶ The confectio *Alkermes Mesue* is thus prepared: R. Serici succo Kermes recenter tincti lbj. succi pomorum dulcium & aquæ rosarum ana lbjß 24 horis macerandam, deinde paulisper his incoquendam donec liquores isti rubeant: quos expresso & abjecto serico, coque cum sacchari opt. lbjß. ad mellis consistentiam:

sistentiam: ab igne depositis, sed adhuc calentibus, misce ambræ crudæ minutim concisæ ʒiv. qua liquata injice pulverem sequentem, ligni aloes, cinnamomi ʒā ʒvj. lapidis lazuli loti, & præparati, margaritarum ʒā ʒij, auri foliorum ʒj, moschi ʒj. Datur ab aureo uno, ad aur. iijß." Thus *Mesue*, l. c. so that here is little Kermes indeed. The conf. *Alkermes Monspeliensum* adds succi gran. Kermes lbj. And on this wonderful confection, *Catelanus*, *Strobelbergerus*, *Bertaldus*, &c. wrote treatises in the last century; though inferior perhaps to that by *Mesue*. Vid. *Pharm. Aug. Zwelf.* p. 253, 254. Our confection might do without the santalum citrinum. The *London* confection consists of succi granorum Kermes colati, p. lbvj. aquæ rosarum M ʒvj. olei cinnamomi ʒß. sacchari purissimi lbj. If ol. cinnamomi ʒj. was used, it might perhaps be called cordial with some propriety.—

L E C T U R E LXV.

J U J U B A.

S E C T. I.

Jujubæ, Zizypha, *offic.* Jujubæ majores, oblongæ. *B.P.* 446. Jujube Arabum, sive Ziziphus Dodonæi. *Ger.* 1501. Ziziphus. *Dod.* 807. *T.* 627. Zizypha sativa & sylvestris. *J.B.* 1, 2, 40. Zizyphus, sive Jujuba major. *Park.* 250. *R.H.* 1533. Rhamnus floribus digynis; aculeis geminatis, rectis; foliis ovato-oblongis. *H.Cliff.* 69. Jujuba sylvestris. *B.P.* 446. The Jujube-tree.

It grows spontaneously in Italy; where, as in Spain, South-France, &c. it is also cultivated; and its fruit by culture much improved. "Florent Maio & Junio: fructus leguntur Autumno, vel post, una cum furculis, & in manipulis colligati, post aliquot dierum insolationem, laquearibus suspenduntur: postremo decerpti, in capsulas reponuntur ad medicos usus. Sunt qui decerpta Zizypha, & cratibus tegetibusque instrata tamdiu insolant, quousque rugosa ibidem fiant." *R.H.* 1534.

It is a stone fruit, like an olive, of a dark red colour, and a very sweet taste. "But now quite out of use, and hardly to be met with in the shops." *Miller's Bot.* 247.

"Arbor Ziziphus Columellæ, l. 9. c. 4. dicitur fructus vero recentioribus Græcis, ut *Actuario* & *Simeoni Sethi*, ζιζυφα ζιζιφα, & ζιτζυφα, Latinis Zizypha: officinis Jujube. *B.P.* "Fructus vix durat ultra sextum mensem." *Hoffman.* 266. "Zizyphus vox peregrina esse videtur." *R.H.* "Jujuba vox est Arabica. *Hoffman.* l. c.

S E C T. II.

They are antacid, and somewhat inrastringing; called pectoral; and commended in coughs, hoarseness, pleurisy, heat of urine, strangury, &c. They are used in decoctions like dates.

“Jujubæ moderate calfaciunt & humectant. Usus præcipui in pulmonum asperitate, tussi, pleuritide, urina acri, ferverescencia sanguinis, erosione renum & vesicæ. *Præpar.* Syrupus de Jujubis.” *Schrod.* 609.

1. They are very sweet, subviscid, and luscious. “Pulpa est melleæ dulcedinis.” *J.B.* “Saporis mellei & vinosi.” *Herm. Cynof.* 395. “Saporis dulcis & vinosi.” *Geoff.* ii. 307. Venetiis recentes abunde venales vidimus, “quamvis palato nostro non multum arrideant.” *R.H.* 1534. — 2. Analysis chymica, ex *libiv.* ℥ij. pulpæ Jujubarum, a nucleis separatæ & in mortario contusæ, ita ut in massam tenacem admodum, & viscidam, redigeretur; prodierunt humorum ℔ij. ℥ij. ʒij. ; olei butyrosi ʒij. ; carbonis ℥xviij. , unde cinerum ℥j. ʒvj. , ac inde salis fixi ʒiv. gr. liv. mere alcali, (ergo terræ ʒix. gr. xvij.) & jactura fuit ℥xiiij. secundum *Geoff.* ii. 309. But here ʒij. are wanting. The mortar discovered more of the nature of this pulp than can be learned from all the analysis.

L U P U L U S.

S E C T. I.

Lupulus. off. *Lupulus mas.* *B.P.* 298. *T.* 535. *J.B.* ii. 151. *R.H.* 156. *Syn.* 137. *Lupulus. Dod.* 409. *Lupulus Sarivus.* *Park.* 176. *Lupulus Salictarius*, sive *Lupulus. Lob.* 347. *Lupulus Salictarius*, sativus, *Ger.* 884. *Convolvulus*, perennis, heteroclitus; floribus herbaceis, capsulis foliaceis, strobili instar. *H.Ox.* ii. 37. *Humulus. H.Cliff.* 458. Hops.

They grow wild in hedges, &c. in England; and are also carefully cultivated in particular gardens or hop-yards. “Non ante Julium floret. Hinc rythmus ille Anglicus: *Till St. James’s day be come and gone, You may have hops, or you may have none.* Fructus initio Septembris maturi sunt.” *R. Syn.* The fruit (called sometimes flores) young shoots, and leaves, are used.

“*Officin.* Flores, & Juli (turiones, asparagi) Martio mense prorumpentes.” *Schrod.* 618. “Ufu folia, flores, & turiones.” *Dale* 67. “Folia & flores.” *Pharm. Lond. vet.* “Folia.” *Pharm. Edinb.* though the leaves are least used.

“*Lupulum* a *Plinio*, l. i. c. 15. (p. 553.) *Lupulum Salictarium* nominatum volunt: qui *Mesue* 2. purg. 24. volubilis foliis asperis dicitur. Hodie in Græcia *βρυονια* nominatur.” *B.P.* See *Mesue Simpl.* l. 2.—“*Lupulus*, ut & *bryonia nigra*, *convolvulus niger*, & *periclymenum*, scandendo motum solis observant, hoc est, a dextra ad sinistram, seu ab oriente per meridiem, versus occidentem flectuntur; nunquam in contrariam partem. Alii a sinistra versus dextram flectuntur, ut *phaseolus*, *cuscuta*, *convolvulus* major & minor: alii nunc in hanc, nunc illam partem, ut *dulcamara*.” *R.H.* 157.

S E C T. II.

Hops are attenuant, antiseptic, diuretic and laxative; called stomachic; and commended internally in phlegmatic obstructions of the viscera, scurvy, jaundice,

jaundice, ague, &c. and outwardly as anodyne and discutient. The young shoots and leaves are milder, and reckoned also diuretic, laxative, antiscorbutic, and sweetners of the blood.

“Flores calfaciunt & siccant 2. Amari saporis anodynique sunt, discutiunt. Usus præcipui in obstructione lienis & hepatis, & inde in ictero, in hypochondriacis affectibus, &c. Ciet menses & urinam. Extrinsicus sedat dolores, auxiliatur contusionibus, luxationibus, tumoribus. Juli mundificant sanguinem, adeoque a scabie præservant (in acetariis assumpti) N. nimius ejus usus gravat caput. *Præpar.* 1. Aqua e floribus. 2. Syrupus, e succo turionum, p. ii. & succo fumariæ, p. i.” *Schrod.* 618.

1. It is very bitter, aromatic, and resinous, containing a sort of turpentine. The young shoots are bitterish, and not unpleasant when boiled. They are rather alkaline or saponaceous than acid. — 2. “Analyſi chymica ex lupuli foliorum & ſummitatum cum fructibus lbv. prodierunt humorum lbiv. 3j. gr. liii; olei ſpiſſi 3iij. 3v; ſalis vol. urinoſi 3j. gr. xxxiv; carbonis 3vj. 3ij. unde cinerum 3ij. 3ij. gr. xxx. ac inde ſalis fixi mere alcali 3iv. gr. lxxvj. (ergo terræ 3j. 3vſ.) & jactura fuit 3iv.” ſecundum *Geoff.* iii. 758. “The hop is bitter, deterſive, and does not redden the blue paper: by a chymical analyſis, this plant yields little acid, a good deal of oil and volatile ſalt; which ſhews that it contains ſome ſal ammoniac, mixed with ſulphur and earth. The young ſhoots and tops are uſed to purify the blood in the ſcurvy, and all the diſeaſes of the ſkin.” *T. Hiſt.* p. 235. — 3. Hops preſerve malt liquors from ſpoiling, or turning ſour, and at the ſame time make them more ſtrong, intoxicating, and ready to cauſe head-achs, and to affect the eyes; as do alſo other bitters and aromatics: but they are more ſtomachic and diuretic: hence of great uſe in cold, moiſt, countries, conſtitutions, and diſeaſes. Hop’d beer in time loſes its bitterneſs, and becomes tart: but if the acid be abſorbed by chalk, or ſuch-like ſubſtances, it becomes as bitter as at firſt, but ſoon grows vapid: which explains, in ſome manner, the nature of bitters, and their effect on fermentation. — 4. They have the virtues of aromatic bitters. “R. Salis nigri, lupulorum recentium aa M. ii. uvarum Corinth. cœrul. libræ ¼ probe contuſa, mixta, & in maſſam fragilem redacta, carpiſ applicentur pro epithemate ad Febrem quotidianam fugandam.” *D. Boyle de Util. Phil. Nat. R. H.* 157. A decoction radicum lupuli is uſed in Spain as a ſudorific, ad curandam alopeciam a lue venerea natam. *Vid. Cluſ. Hiſt.* 126.

It is controverted whether hops are hurtful in the ſtone and gravel: ſome aſſerting that hop’d malt liquors irritate nephritic paroxyſms, which unhop’d ale rather mitigates; and that ſince hops came to be commonly uſed in beer in England, the ſtone has been much more common than it was before: while others hold that hops, being diuretic, muſt rather prevent than breed the ſtone; ale being no otherwiſe uſeful in this diſeaſe, than as, by its lubricity, it eaſes ſome of the ſymptoms; that wine-drinkers are more obnoxious to the gravel and ſtone than beer-drinkers; and that theſe diſtempers are not now more common than formerly. “Quamvis Lupulus frequentioris hodie ſit uſus in urbe Londino, quam unquam antehac fuerit, pauciores tamen inibi nunc dierum, quam ſuperiore ſæculo, calculo laborant, ut ex acuratis D. Graunt obſervationibus patet.” *R. H.* 157. By the *London* bills of mortality, an. 1744. out of 20606 only 29 died of the gravel, ſtone, or ſtrangury; 73 between

tween 90 and 100 years old; and 46 of the gout. An. 1745, out of 21296, only 36 died of the gravel, &c; 55 of the gout; and aged between 90 and 100, 77. From which and other observations it seems, that the stone and gravel are not very common, or not very fatal, in that great city, notwithstanding the great use of hops there; which cannot, one would think, be more hurtful in that disease than other aromatic bitters. “Putamus liquores illos
“fermentatos spirituosos generationem calculi promovere, lympham, seu sanguinis serum inspissando, & ad lapideam usque duritiem coagulando. Quod
“experientia unicuique patebit si sanguinis serum in spiritum vini, aut cerevisiæ infundatur, quod statim concrescit, sicut albumen ovi ignis calore
“coctum, ac tandem prorsus indurescit.” *Geoff.* iii. 759. But however true it may be that spirituous liquors promote the generation of the calculus, he badly accounts for it; as, though highly rectified spirits coagulate the blood’s serum, wines do not so; and if they did, the bad consequences would be more sudden than the generation of a calculus. See what he says of salt and salted meat, *M. M.* i. p. 104.

LECTURE LXVI.

M A L A C I T R E A.

S E C T. I.

1. Aurantium, Aurantia malus. *offic.* Malus Arantia major. *B. P.* 436. Arantia malus. *J. B.* i. 97. Malus Aurantia. *Dod.* 792. Malus Arantia. *Ger.* 1463. Malus Arantia vulgaris. *Park.* 1508. Malus Aurantia. *R. H.* 1658. Aurantium acri medulla, vulgare. *Ferrar. Hesp.* 377. *T.* 620. Citrus petiolis alatis. *H. Cliff.* 379. The Orange-tree.

2. Citreum, Malus Citrea, Citrus. *offic.* Malus Medica, *B. P.* 435. *Ger.* 1462. *Dod.* 792. Citrus. *Cæs.* 139. Citria Malus. *J. B.* i. 94. Malus Medica, vel Citria. *Park.* 1505. Mala Citria, sive Medica. *R. H.* 1654. Citreum vulgare. *T.* 620. Malum Citreum, vulgare. *Ferr. Hesp.* 61. Citrus Petiolis linearibus. *H. Cliff.* 379. The Citron-tree.

3. Limonium, Malus Limonia, Limon. *offic.* Malus Limonia, acida, *B. P.* 436. Malus, Limonia. *Dod.* 791. *Ger.* i. 1462. *R. H.* 1656. Malus Limonia acida vulgaris. *Park.* 1507. Limonia Malus. *J. B.* i. 96. Limon. vulgaris. *Ferr. Hesp.* 193. *T.* 621. Varietas est prioris, secundum *H. Cliff.* 379. The Lemon-tree.

They are natives of both the Indies; also of Assyria, Media, and Persia; whence they were first brought to Italy; and thence carried into Spain, where now there are woods of them. *J. B.* thinks that the orange was the Malum Medicum of the ancients, Theophrastus, &c. though most authors are of opinion that it was rather the critron. “Malus Citria, Græcis μηλεα
“μηδινη, malus medica & Assyria dicitur, utroque nomine a regionibus ducto,
“ut habet Theoph. 4. hist. 4. Etenim Citrus apud Medos & Persas imprimis
“frequens, dein Paladii diligentia in Italiam translata fuit: postea in Hispania
“in

“ in usum devenit, ut nemora & campos occuparit: fructus *μηλα μηδικα ἡπει-
 “ ρεια*, addit Dioscorides, l. i. c. 166. *ἡκεῖνομηλα*; Latinis Citria, Citrea,
 “ & Citromela.” *B. P.* 435.

“ Media fert tristes succos, tardumque saporem
 “ Felicis mali; quo non præsentius ullum,
 “ (Pocula si quando sævæ infecere novercæ,
 “ Miscueruntque herbas, & non innoxia verba)
 “ Auxilium venit, ac membris agit atra venena.
 “ Ipsa ingens arbor, faciemque simillima lauro;
 “ Et, si non alium late jactaret odorem,
 “ Laurus erat: folia haud ullis labentia ventis:
 “ Flos apprima tenax: animas & olentia Medi
 “ Ora foveat illo, & senibus medicantur anhelis.”

Virg. Georg. l. 2. v. 126.

“ Aurantia forte a corticis colore, qui colore auri relucet, ut aurea mala
 “ vere nominari possunt: sive ab Arantia oppido dicta, veteribus ignota, in-
 “ sitione ad nos devenerunt.” *B. P.* 436. “ Aurantium ab auri potius colore
 “ dictum puto quam ab orange, Galliæ oppido; vel ab Arantia Achaïæ urbe.
 “ Aurantiæ enim nomen prisca incognitum, non ante in usum venit, quam
 “ Arantium oppidum deletum est.” *R. H.* 1658. “ Citri vox equivoca est,
 “ & pro duabus arboribus accipitur, altera in frugifera, e cujus ligno mensæ
 “ olim fiebant; altera pomifera, quæ aliter malus medica, & Assyria dice-
 “ batur ut Plinius disertis verbis docet.” *R. H.* 1655. “ Limoniæ nomen
 “ haud temere apud ullum probatum, vel Græcum vel Latinum, autorem in-
 “ venias, videturque posterioris seculi esse inventum.” *R. H.* 1656.

Culture has produced a vast variety of each of these; among which the
Malus Aurantia Hermaphroditica, fructu medio Citrio, medioque Arantio,
 odoratissimo. *H. L.* 407. may be reckoned “ inter hortensia miracula, multi-
 “ vario cultu, & insitionis artificio producta,” as the author there observes.

The fruit of the Orange, including the skin, pulp, seeds, and flowers; the
 cortex Citri conditus; and Lemon peel and juice; are used: but the flowers
 are seldom prescribed: and for the succus Citri, the juice of Lemons is taken.
 Many treatises have been written on these trees. Vid. *Sequier B. B.*

S E C T. II.

The juice or pulp of these is an acid antiseptic; called alexipharmic; and
 commended in ardent and putrid fevers, pestilence, scurvy, worms, and where-
 ever thirst, putrefaction, or bilious acrimony offend. The orange is mildest.

The skins are stimulating, aromatic, and bitter attenuant, diaphoretic,
 and carminative; called cordial and stomachic; and commended in low-
 ness of the spirits, want of appetite, indigestion, nausea, flatulent colics, &c..
 The seeds are more oily, but not so aromatic.

“ Citrinum malum (cum cortice ac carne) alexipharmacum putatur cujus-
 “ libet veneni, resistit putredini morbisque malignis, lumbricos fugat, diapho-
 “ reticum est. Cortex calfacit 1. siccatur 2. (*aliis calfacit & siccatur* 3.) Caro
 “ refrigerat.

“ refrigerat & humectat, & hinc succus expressus. Semen calfacit & siccatur 2.
 “ attenuat, digerit, abstergit, lumbricos fugat. Præparata varia.” *Schrod.* 568.
 “ Aurantia acida & vinosa præferuntur reliquis, easdemque virtutes habere
 “ putantur, quas Citria mala, imbecillius tamen. Cortices calidiores sunt,
 “ usulque vulgaris, in torminibus ventris colicisque (a flatu subortis) inque
 “ dysuria, corrigenda. Quinimo & febrifugi comperti sunt subsequente sudore.
 “ Dosis a ʒj. ad ʒj. Præpar. 1. Aqua, ex floribus. Dicitur peculiariori nomine naphtha, lausam, vel angelica. 2. Aqua, e corticibus. 3. Succus expressus. 4. Syrupus ex succo acido, &c.” *Schrod.* 541.

“ Limonia mala Citri virtutes æmulantur, nisi quod ut magis acidiuscula
 “ sint, ita & magis refrigerantia & siccantia. Usus præcip. in febribus, aliisque
 “ morbis calidis, in calculo, & similibus. Præpar. 1. Succus expressus.
 “ 2. Syrupus de succo. 3. Aqua ex floribus quæ raro extat.” *Schrod.* 616.

1. The skins of these fruits contain (in proper cells) a most fragrant aromatic essential oil, of a pleasing comforting scent; they are also very agreeably bitter; as the pulp or juice is remarkably acid. Hence they claim the virtues of acids, bitters, and aromatics. The leaves also are aromatic (though not so agreeably) and bitter; but the flowers above all are fragrant and sweet smelled, and the water distilled from them not only highly valued as a perfume, but also as a cordial. “ Flores Mali Aurantiæ in præcipuo honore
 “ sunt odoris gratia, & aqua fragrantissime odoris ex iis paratur, quam napham vocant; non tantum ad delicias, sed contra pestem & morbos contagiosos utilem, & cordi amicam, quæ & sudores movet. Hispani parturientibus, in difficili partu, propinant, cum pauxillo aquæ pulegii.” *R. H.* 1659. See some observations on the distilling the essential oil of these fruits, in *Zwelf. Pharm. reg.* p. 664. The bitterness of the peels is easily extracted by water, wine, or spirits. — 2. Citron peel is much commended for weak and windy stomachs, melancholy vapours, palpitation of the heart, obstructions of the viscera, &c. “ Ab experientia Herm. Grube de Malo Citro, p. 36, 37.” *R. H.* 1655. And the alexipharmic virtue of all the fruit is celebrated much. “ Athenæus experimento jamdudum innotuit, sumptum Citrium ante quodvis alimentum, siccum pariter & humidum omnibus venenis resistere, quemadmodum se satis novisse scribit, a suo cive id edoctum, cui Ægypti mandata fuerat administratio. In maleficio deprehensos quosdam ille ad serpentum morsus damnaverat, quos oportebat ejusmodi bestiis objici. Productis illis, & ad theatrum euntibus destinatum latronum supplicio, in via forte caupona quædam misericordia commota, quod in manibus tum habebat, Malum Citrium dedit. Acceptum vero illi comederunt: & paulo post ingentibus ac ferocissimis anguibus oblatis, commorsique ab aspidibus, nihil læsi sunt: qui tandem cum illorum custodem militem interrogasset, num quid bibissent, aut edissent, ut id comperit quod acciderat, nimirum absque dolo Citrium illis traditum fuisse, postridie alteri rursus dari jussit, alteri minime: percussus hic confestim periit, illæso altero qui Citrium comederat. Indeque multis & expertis cognitum est Citrium adversari venenis omnibus. Quod si quis Citrium integrum, & quale natura est, cum semine, in Attico melle coquat, donec liquatum tabescat, & ejus liquoris matutino tempore haustulum sumat, tutus erit a venenatis omnibus medicamentis.” *J. B.* i. 103. *R. H.* 1656. A memorable story *si modo vera!* But, though in itself incredible,

incredible, *Redi* (*Obs. de viperis*, p. 190.) is at the pains to prove it fabulous. The same virtues belong to all the three, they differing principally in the degree of acidity. Some make lemon-juice lithontriptic. "Succo Limonum" scribuntur literæ occultæ, quæ igne admotæ manifestantur." *R. H.* 1659. Mr. *Geoffroy* gives three analyses aurantiorum, viz. Petalorum exsiccatorum, Corticum recentium, & Succi. iii. 151. "Analytis chymica aurantiorum petalorum exsiccatorum lbv. præbuerunt humorum lbj 3xivß. gr. xxii; salis vol. urinosi gr. xxvj; olei 3vij. 3j. gr. xxvij; carbonis lbj. 3x. 3vij. gr. xl, unde cinerum 3v. 3v. gr. xl, & inde salis fixi mere alcali 3iv. 3ij. gr. xij. (ergo terræ 3x. gr. xxvij.) ac jactura fuit 3xiv. 3ij. gr. xxx. (sum lbv. gr. ij.)" *M. M.* iii. 151. N. B. Sal fixum & jacturam."... "Ex Corticum Aurantiorum acidorum lbv. prodierunt humorum lbij. 3xv. 3ijß; olei 3ij. 3vij. gr. lxi; carbonis 3vij. unde cinerum 3j. 3ij. gr. xij, ac inde salis fixi mere alcali 3ij. gr. xvij. (ergo terræ 3vij. gr. lxvi.) & jactura fuit 3vij. 3v. gr. xlvij." (the sum of which is lbv. 3ix: But ol. essent. 3ix. it seems, were included in the first portio humoris, to which I have added it.) *Ibid.* How different these two analyses! He gives the Analytis Corticis exterioris Citri. iii. 332. & Succi Citri. p. 333.

S E C T. III.

The dose need not be determined. We have a syrupus e cortice Aurantiorum, syrupus e succo Aurantiorum, syrupus e succo Limonum, & conserva corticis exterioris Aurantiorum; conditus cortex of all three kinds; & oleum stillat. corticis limonum. The juice of Oranges is one of the succi antiscorbutici. And they are a part of many shop compositions. Thus,

Cortex Aurantiorum is in the aquæ absinthii, bryoniæ, & raphani compositæ; tinctura ad stomachicos; elixir stomachicum, & electuarium cardiacum. The cortex Limonum is in the aqua mirabilis, & raphani composita; & electuarium cardiacum: the succus Limonum (vel Aurantiorum) in the gelatina C. C. and the oleum stillatitium e cort. Limonum is in the spiritus lavendulæ compositus, the spiritus salinus aromaticus, and elixir vitrioli.

M A L A C O T O N E A.

S E C T. I.

Malus Cotonea, vel Cydonia. *off.* Mala cotonea majora. *B. P.* 434. Malus Cotonea. *Dod.* 795. *Ger.* 1452. Cotonea malus. *J. B.* i. 27. Malus Cotonea vulgaris. *Park.* 1504. Malus Cydonia seu Cotonea. *R. H.* 1452. Cydonia, fructu oblongo læviori. *T.* 632. Pyrus foliis integerrimis. *H. Cliff.* 190. The Quince-tree.

It is cultivated in Britain, Germany, France, and Italy; delighting in a moist fat soil, and flowering in April or May. The fruit and seeds are used. It retains its place in the London Dispensatory.

“ *Malus Cydonia*, Græcis *μηλεα κυδωνια*, a *Cydonē* *Cretæ* oppido, unde
 “ primum adveſta, Plinio, l. 15. c. 11. dicitur. *Cotoneum* malum primum
 “ Cato, dein Plinius nominavit. Fructus *μηλον κυδωνιον*, Latinis *Malum*
 “ *cydoneum* & *cotoneum*: Officinis *Citonium*.” *B. P.* *Cotoneum* malum
 “ unde dictum? Nescio. “ Hujus arboris fructus aurea *Hesperidum* mala,
 “ tantopere veteribus decantata fuiſſe, multis probat *Goropius* & *Bod.* a *Sta-*
 “ *pel*, quorum argumenta apud ipſos vide.” *R. H.* 1452. & *Bod. in Theophr.*

S E C T. II.

The fruit is antiseptic and astringent; called stomachic; and commended in vomitings, fluxes, hæmorrhages, &c. The seeds contain an antacid mucilage, chiefly used in gargarisms, collyriums, and clysters.

“ Mala cotonea stomachica sunt, refrigerant 1. siccant 2. astringunt; nutriunt. Usus præcipui in vomitu, alvi fluxu, singultu, laxitate stomachi. “ N. B. ante cibum sumpta alvum constipare creduntur, e contra a pastu
 “ laxare. Semen refrigerat & humectat, mucilage sua lenit, acrimoniam
 “ obtundit. Usus præcip. ad linguæ ariditatem leniendam (gargaris.); ad do-
 “ lorem hæmorrhoidum sedandum (in clysteribus); ad ophthalmiam sedandam
 “ (mucilago cum aqua rosarum facta & imposita); ad scissuras mammarum so-
 “ lidandas, ambuſtaque curanda, &c. *Præpar.* Condita, vinum, rob diacy-
 “ donium, marmelata, miva Cydoniorum simplex, miva Cydoniorum aroma-
 “ tizata, diacydonites simplex, diacydonites compositum, diacydonites laxati-
 “ vum, eſſentia seu spiritus, & 13. Oleum per infusionem. *Schrod.* 582.

1. It is, whilst raw, of a harsh acidulous astringent taste, and very odori-ferous; but boiled, or in marmalade (from *marmellos*, a quince in *Spanish*) it is pleasant enough, and gives a fine flavour to apple-pies: the seeds are viscid and mucilaginous. “ Pulpa odora, adstringens & subacida; semina viscido
 “ quodam lentore lubrica, quem in aquam dejecta deponunt, & ipsam muc-
 “ laginosam reddunt.” *J. B.* 28. i. *R. H.* 1453. and *Geoff.* iii. 368. who adds:
 “ Fructus odorem gratum quidem sed vehementem spargunt, & qui quorun-
 “ dam capita ita percellit, ut ipsis dolorem moveat, præsertim si conclavi in-
 “ clusi habeantur. Some very common apples have the same effect. “ Fruc-
 “ tus saporis acido austeri; semina valde mucilaginosæ & temperata.” *Nucl. Belg.*
 p. 97. — 2. Quinces are said to enervate or weaken the force of poisons by their smell; specifically to correct virulent cathartics, as hellebore, &c. and if much eaten by a pregnant woman, to procure her an industrious and ingenious child, &c. *J. B.* i. 32. col. 2. qui de *Malo cotonea* tractat a p. 27. ad 35. of which three pages are on its vires & usus. “ Si marmelatam rubram
 “ desideras Cydoniorum segmenta in vase operculato & diutius coquenda sunt:
 “ si albam velis, in vase aperto res peragenda, nec tamdiu coquenda segmen-
 “ ta.” *R. H.* 1454. You have the analysis pulpæ, *Geoff.* iii. 368. where the fixed salt is omitted: See *Sylvii de le Boe* effectus mirabilis & valde laudabilis syrupi seu mivæ Cydoniorum. *Ibid.* p. 370.

The Pharm. Edinb. retains a gelatina seu miva Cydoniorum. In the New Lond. Pharm. there is a syrupus Cydoniorum, which is a miva Cydoniorum aromatizata; & a mucilago seminum Cydoniorum, thus: “ R. sem. Cydon. ʒj.
 “ aquæ

“ aquæ 3vj. Coque leni igne, donec aqua fere instar albuminis ovi lentescat; tum per pannum linteum trajice.” p. 77. “ An ounce will render three pints of water thick and ropy, like the white of an egg.” *New Disp.* p. 122.

M E S P I L A.

S E C T. I.

Mespilus. offic. *Mespilus Germanica*, folio laurino non ferrato, sive *Mespilus sylvestris*. *B.P.* 453. *T.* 641. *Mespilus. Dod.* 801. *R.Syn.* 453. *Mespilus sativa. Ger.* 1453. *Mespilus vulgaris. J.B.* i. 69. *R.H.* 1460. *Mespilus vulgaris*, sive minor. *Park.* 1422. *Mespilus*, foliis lanceolatis, integerrimis, subtus tomentosis, calycibus acuminatis. *H.Cliff.* 189. The common Medlar-tree.

It grows in the woods in Germany; where it is also cultivated in orchards, as well as in Britain, France, and Italy; flowering in April. The fruit is used. “ *Officin.* Fructus, officula, folia.” *Schrod.* 626. “ *Usus.* Fructus, semen.” *Dale* 289.

“ *Mespilus arbor* Græcis *μεσπιλος* & *μεσπιλη*, fructus *μεσπιλον*, dicitur; cujus Dioscorides, l. i. c. 169 & 170. duo genera facit; alterum quod a nonnullis *ἀρωια* vocatur, spinosa est . . . alterum in Italia nascitur, quod nonnulli *ἐπιμηλιδά*, alii setanium nominant: arbor est malo similis & foliis, nisi quod minoribus; habet fructum rotundum esculentum, latiore umbilico (leviter astringentem, quique tarde maturefcit). At Theophr. 3. hist. 12. *Mespili* tria genera, &c.” *B.P.*

S E C T. II.

Unripe they are more astringent than quinces; ripe, or rather rotten, they are more acid: but they are little used.

“ *Mespila* refrigerant, siccant, saporis sunt austeri, astringunt, constipant valide, ventriculo noxiæ sunt, præcipue dum duriuscula adhuc extiterant, emollita enim astringunt levius, nocentque minus, ac facile putrescunt. Usus esse possunt in diarrhœa, dysenteria. Extrinsecus in vomitu, fluxu alvi sistendo (cataplasma.) imposita. Officula (lapilli, acini) commendantur summopere ad calculum atterendum & expellendum. Folia similem vim cum fructibus obtinent, adeoque & iisdem indurationibus inserviunt; & præcipue in gargarismis, balneis uterinis. *Præp.* Conditi fructus.” *Schrod.* 626. They are so austere as not to be eatable while hard; but when they rot, or turn soft, they are not so disagreeable, though still astringent and acid. “ Fructus caro dura, astringens valde; quæ tamen fracidâ reddita, acidulum suavemque acquirit saporem.” *J.B.* “ et mensis secundis instruendis inseruit,” addit *R.H.* “ Fructus immaturi, sunt valde acerbi, maturi vero saporis sunt vinosi, dulcis & grati.” *Nucl. Belg.* 196. And they are commended in fluxes and hæmorrhages. “ *Mespila* viridia in magna quantitate devorata, multos diarrhœa pertinaci laborantes sanaverunt, aliis remediis nihil pro-

"scientibus." *E Foresto. R.H. & Boerb. Hist. Plant.* p. 411. . . . According to *Sebol. Salern.* 566. Multiplicant mictum, ventrem dant Mespila strictum.

"Mespila dura placent, sed mollia sunt meliora." As for the lithontriptic virtue of the stones, I believe no body now believes it. *Vid. J.B. i. 71.*

M Y R O B A L A N I.

S E C T. I.

1. Myrobalanus Chebula. *offic.* Myrobalani maximi oblongi angulosi, pituitam purgantes; Arabibus Quebolia & Quebulgi. *B.P.* 445. Myrobalanus Chebulæ citrinis similes, nigricantes. *J.B. i. 205.* Myrobalanus, Chebula. *Ger.* 1500. *Park.* 246. *R.H.* 1531. Chebule Myrobalans—which are the largest and longest, five-ridged, wrinkled, of a dark brown or blackish colour, and subacid astringent taste.

2. Myrobalanus Citrina. *offic.* Myrobalani teretes Citrini, bilem purgantes; Arabibus Azafar. *B.P.* 445. Myrobalani Citrinæ. *J.B. i. 205.* Myrobalanus Citrina, *Ger.* 1500. *Park.* 246. *R.H.* 1531. Yellow-Myrobalans.—These are somewhat smaller than the former, more highly ridged, less wrinkled, of a yellowish colour, and very austere taste.

3. Myrobalanus Bellerica. *offic.* Myrobalani rotundæ Bellericæ; Arabibus Belleregi, Bellileg, Belligu. *B.P.* 445. Myrobalani Bellericæ rotundiores, *J.B. i. 206.* Myrobalanus Bellerica. *Ger.* 1500. *Park.* 247. *R.H.* 1532. Bellerick-Myrobalans.—These are rounder and plumper than the former, about the size of galls, of a brownish yellow colour, and austere taste.

4. Myrobalanus Emblica. *offic.* Myrobalani Emblicæ; Arabibus Embelgi, Embleg, Ambegu. *B.P.* 445. M. Emblicæ, in segmentis, nucleum habentes, angulosæ. *J.B. i. 206.* Myrobalanus Emblica. *Ger.* 1500. *Park.* 247. *R.H.* 1531. Emblick Myrobalans.—These are roundish, of a dark grey colour; and easily separate into three or six segments, disclosing their six-cornered stone: they are pretty acid and subastringent to the taste.

5. Myrobalanus Inda, Myrobalanus nigra. *offic.* Myrobalani nigræ, octangulares; Arabibus Asuar. *B.P.* 445. Myrobalani Indæ nigræ sine nucleis. *J.B. i. 204.* Myrobalanus Indica. *Ger.* 1500. *Park.* 247. *R.H.* 1531. Indian or Black Myrobalans.—These are solid, black, oblong, slenderer than any of the former, and commonly without stones, of an acid subastringent taste.

They are all stone fruits, though the Indian often wants a nucleus; and are brought from the East-Indies, though seldom, as being little, if ever, used. For a fuller description of them, you may consult *Dale* 305. *Lemery's Di&.* 369. *Geoff. ii.* 327. or the authors above cited. The trees which bear them are little known.

Myrobalanus signifies glans unguentaria, or is much the same with Balanus Myrepica. "Hanc appellationem interpretes Arabum, quo somnio inducti non satis scio, tribuerunt fructibus quibusdam exoticis, quos Arabes ipsi Halilegi nuncupant." *Hoffman.* p. 43. "Myrobalani Arabibus inventi, & ex recentioribus Græcis, Actuário cogniti: hos Avicenna, generis nomine "Dilegi, & Serapio Hartileus, donavit: quorum interpretes, cum viderint "quodam-

“ quodammodo ad glandis formam accedere, improprie Myrobalanos vertunt. Genera quinque sunt, quæ Actuarius *μυροβαλαναξανθα, κισθα, Ἰνδικα* aut *δαμασωνια, ἰμπελιτικα, βελιτικα* dicuntur.” *B. P.* Vid. *Actuar. Med.* l. 5. c. 8. p. 274. *B. & Mesue Simpl.* l. 2. c. 2. p. 27.

“ Omnes medici Arabes mihi affirmarunt omnia Myrobalana *Delegi* vocari. Peculiariter vero flava *Azfar*, Indica sive nigra *Asuat*; Quebula *Quebulgi*; Pellerica *Beleregi*, & Emblica *Embelgi*, quæ intelligit Avicenna sub Sinii nomine, l. 2. c. 449. . . . Quinque sunt diversa arborum genera, & in regionibus 60 aut 100 leucis inter se distantibus nascuntur. Proveniunt enim nonnulla in Goa & Batecala, alia in Malavar & Dabul. In toto regno Cambaie quatuor eorum genera inveniuntur: Quebula vero in Bishnagar, Decan, Guzarate, & Bengala.” *Garzias Clus. Exot.* 194. Vid. quæ *Aussa* habet *Ibid.* p. 270. “ Recentiores quinque Myrobalanorum differentias hoc distycho comprehendunt,

“ Myrobalanorum species sunt quinque bonorum,

“ Citrinus, Chebulus, Bellericus, Emblicus, Indus.” *J. B.* i. 202..

“ Chebulus & Citrinus, Bellericus, Emblicus, Indus.” *Hoffman.* 43.

“ Sunt Chebulæ, Citrinæ, Belliricæ & Emblicæ & Indæ.”

Marg. M. M. contrael.

“ Actuarius is the first Greek writer who has mentioned or described the milder sorts of purging medicines, such as cassia, manna, senna, Myrobalans: the two last he says were brought from foreign parts to his country, *i. e.* from Syria to Egypt. . . . He professedly takes them from the Arabians, whom he calls Barbarians, who without dispute first introduced these simples into physic. He gives the same account of the three sorts of Myrobalans as they do, and quotes the name of the Emblicæ & Belliricæ in their own language. These two last, though in their qualities they have a great affinity with the Myrobalans, yet are here distinguished from them, as they are indeed by all the Arabians. Myrepsus seems to be the first who confounds them with the Myrobalans, and therefore mentions five sorts of them, as the moderns do generally after him.” Vid. *Friend's Hist.* i. 271.

S E C T. II.

They are all astringent, yet called purgative; and commended in the dysentery, and other fluxes: but they are now-a-days very little used.

“ Myrobalani citrini seu flavi, bili flavæ educendæ apti nati sunt: Indi seu nigri, bili atræ: Chebulæ pituitæ ac postea bili: Emblici ac Belliricæ, item pituitæ. Dosis a ʒvj. ad ʒiʒ. *Præp.* 1. Pilulæ de quinque generibus Myrobalanorum. 2. Extractum Myrobalanorum.” *Schrod.* 771.

1. They are all somewhat acid, and astringent more or less to the taste. I can discover no acrimony or heat in any of them. — 2. I mixed a decoction of one chebule and two citrine Myrobalans with a solution of vitriol, and had instantly a good bluish black ink, which kept its colour better than what I made with galls the same way (*Martii* i. 1726.) “ Indi his utuntur Myrobalanis (an Emblicis tantum, aut omnibus?) ad depfanda coria, & atramentum

“ con-

“conficiendum.” *Geoff.* ii. 331. — 3. Although they are much commended by the Arabians as cathartic, yet they owned that they corrugate the stomach and intestines, operate too slowly, and were astringent; and hurtful to obstructed viscera: and so wanted to be corrected by acria aperientia, diuretica, lubricantia, oleosa, &c. Vid. *Hoffman*, p. 44. and *J. B.* i. 207 to 209. The decoctum epithymi, the last composition in the *Pharm. Lond.* 1721. in which there were any Myrobalans, was omitted by Quincy as seldom ordered. And now the whole five Myrobalans are, I think, justly excluded the *London M. M.*

“Chebulæ conditæ, autore Mesue, ventriculum firmant, appetentiam invitant, coctionem promovent, rationalem animæ partem vegetam reddunt, visum acuunt, &c.” *R. H.* 1532. “A Marsilio Ficino ad vires visceraque roboranda, & homines a senectutis squalore præservandos (Myrobalani) laudantur.” *Boecler. in Herm. Cynof.* p. 350. There is an imaginary analysis omnium Myrobolanorum; and the effect of their infusion on the blue paper twice set down in *Geoff.* ii. 331.

NUCES CUPRESSI.

SECT. I.

Cupressus. offic. *Cupressus. B. P.* 488. *Dod.* 856. *J. B.* 1, 2, 280. *Park.* 1476. *R. H.* 1406. *Park.* par. 602. *Cupressus sativa & sylvestris. Ger.* 1367. *Cupressus meta in fastigium convoluta, quæ fœmina Plinii; (& Cupressus ramos extra se spargens, quæ mas Plinii.) T.* 587. *Cupressus foliis umbricatis erectis. H. Cliff.* 449. The Cypress-tree.

It is a native of Candy: but bears our winters pretty well; though the frost in 1683 killed almost all the Cypresses in England. *R. H.* It is a large tree, and its wood very durable. The gates of *St. Peter's* church at *Rome*, which lasted from the days of Constantine the Great to Pope Eugenius IV. (i. e. more than 1094 years) intire, “non tantum incorruptæ, sed nitentes & novis similes,” were made of it. The Egyptian mummies are often found in Cypress chests. It is even said never to rot, but to continue always of a good smell. Vid. *R. H.* It is not only the *κυπαρισσος* Græcorum; but probably also the gopher-wood of the Hebrews, whereof Noah's ark was made. See Bishop *Patrick's* Comment, vol. i. p. 34.

The fruit is chiefly used, and called *Cupressi nuces*, coni, pilulæ, galbuli, Cypress-nuts or cones; which are roundish, about the size of small walnuts, of a brown colour, bitterish astringent taste, and little smell. “*Officin. Lig-* num, fructus, & raro folia. N. B. Fructus sive conos, nuces vel pilulas “*Cupressi officinæ nominant; aliis gabulæ dicuntur.*” *Schred.* 577. *Cupressus, κυπαρισσος*, is not described by *Dioscorides*, l. 1. c. 102. p. 54. but *Theophrastus* gives many characters of it. “*Theophr.* 1. hist. 8. procero & longo “caudice constat, tamen macilento: 1 hist. 13. Mas nodosior est fœmina: “1 hist. 14. Simplici assurgit caudice ad longitudinem, sed non multis radi- “cibus, neque ramis frequentibus patet: 1 hist. 15. Viret perpetuo: 2 hist. “3. Plerumque ex fœmina marem provenire affirmant: 1 caus. 5. hujus “fructus non id totum est, quod pilæ speciem gerit, sed quod cono innascitur, “præ-

“ prætenue exile, & quasi laricis semini proximum, quod pilula sua dehiscente delabitur.” Vid. *B.P.*

S E C T. II.

It is astringent; and commended in fluxes, mictu involuntario, fluore albo, dysenteria, hæmorrhages, hernias, &c. given in substance to ʒj.

“ Lignum refrigerat, siccatur, astringit. Fructus & folia calfaciunt parum, exsiccant ad gr. 3. astringuntque valide, proin usus sunt præcipui, in hæmoptysi, diarrhœa, dysenteria; commendantur itidem in mictu involuntario, ut & in herniis curandis, intus & extus exhibita.” *Schrod.* 577.

1. They are of a bitterish, astringent, and somewhat resinous taste; and yield in hotter countries a sort of turpentine. *R.H.* 1404 & 1408. “ Sapor acerbus potissimum in pomo elucet. Ligni odor suavis, sapor vero vix ullus excellens, præterquam in cortice, qui evidenter linguæ offert adstrictionem cum amarore, eoque haud ingrato in veteri quod excessit 30 annos.” *J.B.* “ Analyti chymica ex nucum Cupressi recentium prodierunt humorum lbij: ʒv. ʒivß. olei ʒiij. ʒv. gr. xxxv; carbonis ʒxiv. ʒviß, unde cinerum ʒij. gr. xvij. ac inde salis fixi alcali ʒj. gr. xlix. (ergo terræ ʒvij. gr. xli;) & jactura fuit ʒvij. ʒvij.” according to *Geoff.* iii. 385. But here the quantity is only lbiv. ʒxv. ʒvij. gr. xxxv. so that gr. xxxvij. are wanting. “ Fructus inter adstringentes sunt celeberrimi usus. . . Insuper vis febrifuga illis tribuitur. Eorum pulvis ad ʒj. in vino maceratus propinatur in febribus intermittentibus, vel etiam in quartana, eandem dosin quarta quaque hora reiterando.” *Geoff. ibid.* — 3. Dioscorides commends the leaves internally in vesicæ rheumatismo & dysuria; and the pilulæ in diarrhœa, dysenteria, tussi, orthopnœa, hæmoptoe, hernia, &c. and outwardly for inflammations, wounds, and ulcers. “ Nuces serviunt gargarismis affectuum calidorum oris & faucium.” *Hoffman* 271.

N U C I S T A.

S E C T. I.

Nucista, Nux moschata, Nux myristica, *offic.* Nux moschata, fructu rotundo; Chrysobalanos Galeni quibusdam. *B.P.* 407. Nux aromatica, vulgo moschata. *J.B.* i. 255. Nux moschata rotunda, sive scœmina. *Ger.* 1536. Nux moschata. *Park.* 1600. *R.H.* 1522. Myristica. *Lin. Gen. Pl.* p. 524. N°. 1016. The Nutmeg-tree. — And Macis. *offic.* Macis officinarum. *B.P.* 407. Macis seu secundum involucrium Nucis myristicæ. *R.H.* 1524. *Mace.*

It grows in the Bandas—some of the Molucca islands, belonging to the Dutch, who conquered Banda with its dependencies in 1621; since which time they have been sole masters of this branch of commerce. vid. *Savary's Dict.* i. 1205. Pere Labat says a Dutchman once carried a Nutmeg-tree to Guadalupa, an island in America belonging to the French, where it prospered very well, till another Dutchman rooted it up and burnt it in the night. *Savary's Dict.* iii. 2, 348. *Did Banda belong once to England?* I:

It is a pretty large ever-green tree, having always both flowers and fruit on it; and yields commonly three crops of fruit annually, viz. in April (which is the best), August, and December. The fruit resembles green walnuts, consisting of an outside fleshy coat; of the mace spread over a woody, dark brown, thin shell; and the Nutmeg within it. "The best Nutmegs are firm" and weighty, and being pierced by a needle or pin emit an oiliness." *Mil-ler's Bot.* 315.

The *Nux moschata mascula*, *i. e.* *Nux moschata fructu oblongo*, *B. P.* 407. is reckoned a wild or degenerate sort; neither it nor its mace being near so aromatic as the common nutmeg and mace; so that it is never used. It grows, they say, in many parts of the East-Indies, especially in the island Candore. *Vid. Savary's Dict.* ii. 838.

"*Nux moschata veteribus Græcis, cum sua mace, incognita fuit, at recentioribus* *μοσχο καρπον, vel καρπον ἀρωματικον* dicitur: forte *Nux Indica*, in suffimento *Moschato* *Aëtii*." *B. P.* "J. Bauhino, ut & Guilandino Comacum Theophrasti, Cinnamum & Caryopon Plinii esse videtur. Idem & Chrysobalanon Galeni esse suspicatur." *R. H.* But probably we had them from the Arabians; and Avicenna is the first who mentions them.

"*Eligenda Nux recens, gravis, pinguis, & quæ acu puncta succum oleo- sum remittit. Macis probatur odore suavi, sapore subacri, colore flavo.*" *Schrod.* 629.

S E C T. II.

They are attenuant, carminative, anodyne, diaphoretic, and diuretic; said to be cephalic, stomachic, and uterine; and are commended in want of appetite, indigestion, vomiting, flatulent colics, palpitation of the heart, fainting, strangury, &c. The mace is reckoned the strongest of the two.

"*Nux calfacit & siccatur, subastringit, est stomachica, cephalica, uterina, discutit flatum, coctionem juvat, halitum foetidum oris emendat, foetum recreat, lipothymia & palpitationi cordis succurrit, lienem minuit, alvi fluores compefcit, vomitum sistit. Macis eadem vires adscribuntur, quia tamen partium tenuiorum existit, ideo & operando efficacior, & magis penetrans habetur. Præpar. Nucistæ conditæ, confectio macis, aqua nucistæ, oleum nucistæ stillat. (cujus dosis gr. iii. iv.) oleum nucistæ expressum, sal nucistæ; oleum macis stillat. (cujus dosis gr. iii. iv.) oleum macis expressum, extractum, balsamus macis, balsamus nucistæ.*" *Schrod.* 629.

1. Nutmegs are of a warm, aromatic, bitterish yet agreeable taste; and pleasant spicy smell: the mace is somewhat hotter and more fragrant: both are very oily. "*Nux moschata est sapore & odore aromatico & subastringente: macis saporis jucundissimi, aromatici, acriusculi, cum amarore quodam.*" *J. B. R. H.* "*Macis odoris aromatici pergrati; saporis acris & aromatici, cum amarore quodam. Nux moschata est odoris eximii, saporis acris cum suavitate amaricantis.*" *Geoff.* ii. 439. "*Nux odoris suavis & fortis, præcipue dum teritur, saporis, calidi & aromatici.*" *Nucl. Belg.* 209. "*Macis odoris fortissimi & grati, saporis maxime aromatici calidi.*" *Ibid.* 210. Nutmegs 3xvj. yield by expression olei 3ij. 3ij; while from the same quantity of anise seeds, olei 3x can scarcely be got. *Vid. Lemery's Chym.* 603. — 2. Their oils

oils are anodyne and somniferous (*externæ et internæ*) as are the substances themselves. "Conditæ in India nuces pollent insigni facultate narcotica, qua largiore usu soporosos invehunt affectus. Hinc non dissimile veri est quod tradit D. Tavernier; *nimirum* cum hæ nuces maturefcere incipiunt aves paradisiacas harum vescendarum avidas, magnis gregibus ad Moluccas insulas convolare, non secus ac turdos vindemiæ tempore in Galliam; nec tamen deliciis suis impune fruuntur: nam cum fructibus hisce ad satietatem se ingurgitarunt, vertigine correptæ, in terram velut ebriæ decidunt, ubi jacentium crura formicæ brevi comedunt." *R. H.* 1524. "It is observable of the nutmeg-tree, it is never planted; but, when the nutmegs are ripe, several birds come from the islands towards the south, and devour them whole, but are forced to throw them up again before they be digested: the nutmeg then besmeared with a viscous matter, falling to the ground takes root, and produces a tree, which would never thrive if planted." *Tavern. Harris Col.* ii. 373. But! travellers take liberties. "Memini generosam Anglam gravidam esu 10 vel 12. nucum myristicarum ebriam delirasse." *Lob. Obs.* 570. *J. B.*'s story is more remarkable: "In mea juventute, quum ego (*J. Bauhin*) pedes Florentia redirem, & in Apenninis montibus frigidam avidius bibissem, subito incidi in insignes ventris dolores, flatibus in scroto vexantibus, accedente tumore, sine tamen ulla hernia præcedente aut subsequente. Cum existimarem me in monte præ doloribus periturum, itineris socius *Osualdus Gabelkouer* amice obtulit nuces moschatas quas secum habebat. Devoratis quatuor, subito per Dei gratiam & hoc remedio, liberatus fui a doloribus, atque iter perfeci sospes & incolumis." *J. B.* i. 260. "Revera non minus periculi est in maci quam in nuce, si copia peccetur. Novi matrem, quæ cum filix plusculum dedisset ad movendos menses, animadvertit in illa delirium aliquot horarum." *Heffm.* 399. — 3. They are commended also for the hickup, palsy, difficult labour, mensibus obstructis, diarrhœa, dysenteria, &c.

S E C T. III.

They may be given in substance to ʒj. and sometimes to ʒss: the essential oil of either to gut. iv: oleum expressum to gr. viij. The nux condita comes from the Indies, and is used in the electuarium cardiacum. The nutmeg is an ingredient in the aqua raphani composita & trochisci cardialgici; ejus ol. stillat. in the spirit. lavendulæ compositus, spiritus salinus aromaticus, & elixir vitrioli: the mace in aqua absinthii composita, aqua mirabilis, & pulvis diarmatowy; and its oleum expressum, in the emplastrum stomachicum.

"Macis oleum, ut oleo nucis quantitate cedit, sic qualitate antecellit: magisque commendatur in nervorum affectibus, & aliis frigidis morbis: quin & podagram pedi oblitum sanare Cronemburgius refert." *R. H.* 1524.

"The oil of nutmegs by expression is usually called oil of mace, in the shops; it is brought from Holland in square flat cakes, and is believed to be mixed with suet, or some other unctuous matter. There is an oil of mace by expression sometimes to be met with, but very rarely: it is of a liquid form, but somewhat thick and curdled, and of a reddish-brown colour, having the perfect smell of mace with a little sourness." *Mil. Bot.* 316.

NUCES VOMICÆ. *Vide* p. 37. *supra*.

PAPAYER. *Vide* Opium *infra*.

P A S S U L Æ.

S E C T. I.

Vitis, Vitis vinifera. *offic.* Vitis vinifera. *B. P.* 298. *J. B.* ii. 67. *Dod.* 415. *Ger.* 875. *Park.* 1555. *R. H.* 1613. Vitis foliis palmato-angulatis. *H. Cliff.* 74. The Vine, or Vine-tree, or manured Vine . . . of which there are many varieties : but it differs not specifically from the

Vitis sylvestris, Labrusca. *B. P.* 299. *T.* 613. Labrusca. *Lugd.* 1406. Labrusca, five vitis sylvestris Europæa. *Park.* 1555. Vitis sylvestris Virginianæ. *B. P.* 299. Vitis sylvestris Virginiana. *Park.* 1556. *R. H.* 1615. Vitis fructu minore rubro acerbo, folio subrotundo minus laciniato, subtus alba lanugine tecto. *Sloane's Cat.* 171. *Hist.* ii. 104. The Wild Vine of Europe, and of Virginia.

It grows in South-France, Spain, Italy, &c. and is cultivated in every country where there is sun enough, and not too much, to ripen the fruit. It flowers in June, and the fruit is ripe in September and October. The Vine furnishes the shops with several simples, as, 1. Folia, pampini, (the leaves; capreoli, (the tendrils); & palmities (young shoots). 2. Lachryma, succus, aut aqua vitis (which is the juice issuing from wounds made in the Vine in April. 3. Omphacium, *vulgo* agresta; succus uvarum immaturarum, (Verjuice). Ὀμφαξ is uva immatura, unde omphacius, & omphacinus. Agresta, vox Latino-barbara, denotes commonly verjuice; but sometimes unripe grapes are called agrestæ. Vid. *Schrod.* p. 702 and 727. Agrestis succus and agrestes uvæ properly signify the juice and grapes of the Labrusca. 4. Uvæ maturæ, ripe grapes.) 5. Uvarum acini, vinacei, gigarta, (grape-stones). 6. Vinum; & inde spiritus, acetum, tartarus.

The grapes, when dried, are by us called raisins; of which we have two sorts. 1. Passulæ, uvæ passæ, & passulæ majores. *offic.* There are different ways of making them, (Vid. *Ray's Journey*, *Harris's Col.* ii. 591.); some cutting half through the foot-stalk of the clusters, let them dry on the trees; others dipping them in boiling lye, dry them afterwards in the sun. *Savary's Dict.* ii. 1270. They come from Spain: and are Passulæ damascenæ. *off.* Dale 320; Passulæ maximæ, seu damascenæ, zibebæ dictæ. *Schrod.* 702; Uva passa major βεραστος Græcis. *B. P.* 299. Damask raisins are sometimes used as a sweetmeat, but not in medicine here. 2. Passulæ minores, uvæ passæ minores; uvæ Corinthiacæ. *offic.* Uvæ passæ, minores; vel passulæ Corinthiacæ. *B. P.* 299. Vitis Corinthiaca, five apyrina. *J. B.* ii. 72. *R. H.* 1614. *T.* 613. Passulæ Corinthiacæ. *Park.* 1557. The Currant-Vine. It grows not about Corinth now, but is cultivated in Zant, Cephalonia, Nathaligo, and other islands belonging to the Venetians. Vid. *Savary's Dict.* ii. 1269.—“Genera vitium innumera atque infinita esse prodiderunt, quod verius apparebit de vinis.” *Plin.* l. 14. c. 2. p. 340. “Duo sunt liquores corporibus humanis gratissimi, intus vini, foris olei, arborum e genere ambo præcipui, sed oleum necessarius.”

“ rius. Nec segniter vita in eo elaboravit. Quanto tamen in potu ingenio-
 “ fior apparebit, ad bibendum generibus centum nonaginta quinque, si species
 “ vero æstimentur, pene duplici numero excogitatis, tantoque paucioribus
 “ olei.” *Plin.* l. 14. c. 22. p. 355. For the wines in use in Britain, see
R. H. 1617. See also *Savary's Dict.* ii. 1950. And for the nature and effects
 of fermentation, without which neither wine nor vinegar can be produced,
 vid. *Boerb. Chem.* ii. Procef. 42 and 50. We shall consider tartar amongst the
 concreted juices.

Among the many treatises on wines, *Andree Baccii, Elpidani*, de naturali
 vinorum Historia, de vinis Italiæ, & de conviviis antiquorum, L. vii. accessit
 de factitiis & cervisiis: deque Rheni, Galliæ, Hispaniæ, & de totius Europæ
 vinis; & de omni vinorum usu compendiaria Tractatio (Romæ 1596, 1597,
 1598. and Francofurti 1607. all in folio) is reckoned a standard book. See
 its character in *R. H.* p. 1617.

S E C T. II.

Raisins and currants are antacid, diluent, laxative, and nourishing; called
 pectoral; and commended in coughs, consumptions, scurvy, obstructions in
 the hypochondriac viscera, heat of urine, &c. The stones are astringent, but
 mildly so.

Wine warms and comforts the stomach, cheers the spirits, and invigorates
 all the functions: hence it is a noble cordial, if used medicinally; but taken
 to excess it intoxicates, is somniferous, and almost narcotic, making some fu-
 rious, and others stupid.

N. B. *Vinegar* (which is prepared from wine) is an acid, antiseptic, and the
 most efficacious as well as safest of all the strong vegetable acids; esteemed as
 an alexipharmic; and is commended in ardent, putrid, and malignant fevers,
 bites of serpents, lethargies, convulsions, drunkenness, as an antidote to nar-
 cotic poisons, &c. But verjuice has the virtues of acetosa, being astringent,
 but neither so subtiler nor so light as the vinegar.—The lachryma vitis differs
 not much from water; it is commended for the gravel and sore eyes. The
 young shoots, leaves, and tendrils, are subastringent; but little used.

“ Folia, capreolique refrigerant, astringunt valide. *Ufus præcip.* in dysen-
 “ teria, vomitu, pica, expuitione sanguinis, aliisque hæmorrhagiis sistendis,
 “ (succus expressus assumitur). Extrinsecus refrigerant ac leniunt capitis do-
 “ lores ac æstum, conciliant somnum in lotionibus pedum, ut & ipsi capiti
 “ adhibita.”—Lachryma vitis, intrinsecus vim habere creditur atterendi &
 “ expellendi calculum: oculorum caligine medetur ac rubedini, instillata; im-
 “ petigines sanat, si locus affectus, nitro antea fricatus, ea lavetur.”—Agrestæ
 “ refrigerant, siccant, astringunt. Proin poterit esse usus earum in febribus
 “ ardentibus, excitant *scil.* appetitum, fluxum ventris sedant, ast sanguinem
 “ indigestum procreant. *Vide etiam omphacium.*—Uvæ maturæ, calfaciunt
 “ & humectant 1. recenter deglutitæ generant inflammationes & cruditates
 “ ventriculi, diarrhœam & similes: magis tamen id faciunt adolescentes, minus
 “ ruficantes. Exiccataæ uvæ ventriculo commodiores sunt, appetitumque ex-
 “ citant, alvum laxant.”—Passulæ omnes calidæ sunt, seu temperatæ, leni-

“unt, alvum laxant, acrimoniam hebetant; ventriculo, pulmonibus ac epati gratæ sunt; tussim mitigant. Zibebæ dictæ, exemptis acinis (gigartis) in aqua infusæ, potum ægrotis exhibent sat gratum, si que convenientem. Acini vim habent adstrictoriam, conveniuntque in vomitu, alvi que fluxu, si ve intrinsecus si ve extrinsecus adhibeantur (torrentur scil. & teruntur).”
 —“Vinacea (*i. e.* siliquæ cum acinis in expressione musti residuæ) magnarum virium perhibentur in arthriticis doloribus sedandis; si membrum affectum vinaceis per se calescentibus imponitur. *Præpar.* 1. Cinis sarmentorum. 2. Loch passulatum. 3. Mel passulatum. 4. Conditæ passulæ laxativæ.”
Schrod. 702.

“Omphacium inservit tam esculentis quam medicamentis. Refrigerat 2. siccatur 1. Substantiæ est crassioris, saporis acido-acerbi. Usus præcipui ad hypochondria ardentia, stomachi ardorem (orificio impositum) imo calidis morbis omnibus feliciori juvamento est, quam acetum, quod præter refrigerandi vim & caliditate acri pollet, secus ac omphacium. *Præp.* Syrupus de agresta.” *Id.* 727. “Acetum accedit proxime ad naturam vitrioli. . . . Substantiæ est mixtæ, frigidæ ac calidæ (superat tamen frigiditas caliditatem) in reliquis siccatur; partium est tenuium, attenuat, penetrat, astringit, putredini resistit, sudorem ciety; primasque tenet, præ cæteris correctivis, quorum opera gummi calfacientia, succive venenati corriguntur. Per se quoque singulare est remedium adversus ictus serpentum etiam venenatissimorum, quales sunt aspidæ.” *Quercet. Præp.* 1. Aceta distillata, N^o. 6. 2. Crystalli ex aceto.” *Schrod.* 707.—“Spiritus vini calidus est & siccus, penetrantissimus, incorruptibilis, resistit putredini: refocillat apoplecticos, comate oppressos, &c. Extrinsecus resolvit tumores frigidos ac scorbuticos, arcet coagulationem sanguinis in contusionibus, cruoremque resolvit ac discutit.” *Schrod.* 752.

What our senses can discover of these substances, together with their well known effects, and what has been said of sweet, subacid, and acid fruits, &c. sufficiently explain their virtues. It is not amiss however to notice the difference between the unfermented juice of the grapes and the same fermented, as well as between wine and vinegar, which is indeed very great. For—1. Must, grapes, or raisins, by distillation, yield a great deal of insipid water, not at all inflammable; whereas an ardent spirit, in considerable quantity, first rises from wine; and from vinegar an acid spirit, which extinguishes fire. “If you distill must, a great quantity of insipid water rises first, then a weak acid spirit, and foetid oil; and there remains a terrestrial mass or carbo, whence fixed salt and earth may be obtained the common way.” *Lemery's Chym.* p. 664. “Wine yields first an inflammable spirit, then a great deal of phlegm; next an acid spirit, and foetid oil, but not near so much oil as the must: and from the remaining carbo a fixed salt may be got, like that of tartar.” *Lemery's Chym.* p. 672. “Vini partes sunt: 1. Essentia subtilissima incorruptibilis *vulgo* aqua vitæ, aqua ardens, spiritus vini, sulphur cœleste, sulphur bezoardicum vegetabile, menstruum cœleste, aqua cœlica, Lullii cœlum, clavis philosophorum, corpus æthereum ex aqua & igne constans, balsamus volatilis liquoris catholici. 2. Magna copia aquæ insipidæ corruptibilis. 3. Hanc sequitur spiritus quidam fumidus, qui nihil aliud est, quam sal vini & volatile crassius, in forma fumi ascendens. 4. Huic mox
 “sub-

“subjungitur oleum quoddam vere pingue & unctuosum, combustile, sed paucum. 5. Ex capite mortuo extrahitur sal commune quoddam corrosivum. 6. Post extractionem salis communis relinquitur terra limosa inutilis. *Sala* in anatomia antimonii.” *Schrod.* 751. “Acetum destillatur in aquam acidam, spiritum acidum, liquorem acidissimum, ponderosum tætidum, & oleum miri nidoris; nigra remanente fæce acidâ; que igne aperto exusta dat fæces fuscas, in quibus alcalescens sal satis copiosus & acer.” *Boerb. Chem.* ii. 215. But—2. Must cools, relaxes, purges: wine heats, strengthens, binds; it also cheers, intoxicates, stupifies; whereas vinegar calms, and is a remedy for drunkenness. Let us hear the Great *Boerhaave* on this subject: “Maturissimarum uvarum succus meracus forte est dissolvens humorum summum, immodico usu dysenteria lethali sæpe necans. Coctione spissum malti apozema, largius potum idem efficit. Fiat vero ex priori forte antiquum vinum, ex posteriori cervisia generosa vetus, aut de utrisque spiritus stillatitius, & imprimis alcohol, dabit priorum antidoton. Fermentatio (enim) convertit succos vegetabiles, ex facultate sua laxante, resolvente, saponacea, refrigerante, & purgante plerumque per alvum, in potentiam corroborantem, cogentem humores, exsiccantem, calefacientem. Natura vero vino unicuique communis, cognoscitur præcipuè facultate excitandi temulentiam in spirituum, actionumque animalium functione. Dum excitat, reficit, animat, exhilarat; jocis lusu, facundiæ, carminibus, saltibus aptat: postea proprios cuique latentes affectus incendit, promit, abscondita revelat; deinde sensus externos, internosque, ut & voluntarios motus turbat, debilitat, tollit, ut nec pes, neque manus, neque lingua, neque mens officium faciat. Tum soporem, paralytin, apoplexiam, mortem denique facit. Hæc autem vini propria virtus habetur. Nec similis in ulla alia re mihi hæcenus cognita proprietas est. Nam hyoscyami, nicotianæ, opii, stramonii, longe alia est ratio, dum cerebrum turbant. Estque in omni vino fere eadem: quia cervisia, hydromel, pomatum, pyratum, vinum grossulariæ, uvarum, aliarum baccarum rite confectum, semper idem efficit: ut ita mirabilis hæc potestas soli sit fermentationis virtuti propria.” *Vid. Chem.* ii. 182. All which are owing to the inflammable spirit which wine contains, and is produced only by fermentation. According to *Macquer*, wine by distillation yields about a fourth part of inflammable spirit, or eau-de-vie, (ch. prat. 2. p. 201.) which consists of pure spirit, and more than an equal quantity of water, which by rectification can be separated. And even when reduced to an alcohol, *Van-Helmont* says, by distilling it with salt of tartar, one half of it becomes pure water. This did not succeed with *Boerhaave*; but Mr. *Macquer* thinks it practicable. For since it consists of acid, oil, and water, it may be decomposed, by separating the acid, by a fixed alkali; as the oil may be destroyed by ignition. For when it is burnt under a bell, as they do sulphur, a great quantity of water is collected. *Vid. Macq.* l. c. p. 212. &c. — 3. Vinegar is not wine corrupted, more than wine is must corrupted, but produced of wine by a secondary fermentation. Strong wine affords strong vinegar; weak wine weak vinegar: but wine deprived of its spirit, and quite vapid, will never be vinegar; neither can vinegar be made without fermentation. “Acetum est sal volatilis oleosus acidus, admodum utilis; quoniam putredini, humoribus animalium adeo communi, adeo periculose, adversus; “interim

“ interim oleosi adunati mitificatione minus acris habetur. Simul adeo pene-
 “ trabilis liquor hic est, ut, sine partium secessu diversarum, per densissima
 “ sola (cola?) transeat quam expeditissime, viribus intactis; imo & totum fere
 “ per corpus humanum, paucissima forte vascula exceperis libere meabilis est,
 “ indeque in plurima vasa poterit distribui, ibidemque exercere vires quas
 “ possidet proprias, imprimis excitatas vitali motu, & calore naturali. Quin
 “ & permisceri se patitur facile cum omni genere humorum corporis nostri noto,
 “ ne olea quidem exceperis; hac igitur tenuitate, & permiscibilitate sua, in
 “ corpore nostro plurima perficit. Refrigerandi vim habet eximiam, quoties
 “ febris oritur stimulo acrioris bilis, alcalascentis salis, aut putridi nati in cor-
 “ pore humano, & a morfu venenato ferarum, sitim & hinc oriundam simul
 “ sedans. . . . Morfui curando virulentorum aliud non est posca efficacius, exi-
 “ mio in rabie canina exemplo. Ebrietati adeo quidem adversa, ut cum
 “ spiritus vini fermentatitius unicum fere sit, temulentiam quod concitat,
 “ aceti spiritus eandem jam citam domet. Imo vero somno & vino sepultus
 “ ex abusu spirituum, ingesto excitatur aceto. Hinc nervis ipsis erigendis,
 “ movendisque spiritibus, vix aliud aptius. Debilibus, languentibus, lethar-
 “ gicis, soporosis, syncoticis, vomituriensibus, incassum sæpe occurrere co-
 “ natus per artificiosissima chemiæ producta, summum tandem in aceto, nari-
 “ bus orique adhibito, vel in ventriculum ingesto, auxilium impetravi. Quin
 “ etiam, quod soli credent experti, convulsis, hypochondriacis, hysteriis pro-
 “ deesse sæpius memini. Jure ideo Hippocrates & Galenus & splenicis lauda-
 “ bant. Ad putredinem veram humorum, corruptionem mortiferam, gan-
 “ grenosos reptatus, adeo prodest, ut nihil habeat simile: quod expertus palam
 “ eloquor. . . . Sed & attenuandi virtutem quoque, pace aliter sentientium,
 “ aceti virtutibus accenseo: si enim tepefactum cruori immiscetur, ejusdemve
 “ fero, diluit illa, non cogit, nec generat hac admistione polypos, sed suaviter
 “ resolvit coagulata. In acutis ideo febribus, in ardentium febrium immani-
 “ tate, in peste, variolis, morbillis, similibusque malis, ubi fida anatome to-
 “ ties coagulata reperit, acetum remedium summum, &c.” *Boerb. Chem.* ii. 212.
 Who after the distillation of vinegar, says, “ Ex quibus patet acetum differre
 “ tota natura ab acidis quibuscunque notis.” p. 217. And certainly it is
 vastly safer than any mineral acid.

P I P E R.

S E C T. I.

1. Piper nigrum, *offic.* Piper rotundum nigrum, *B. P.* 411. *R. H.* 1341.
 Piper nigrum. *J. B.* ii. 181. *Ger.* 1558. *Park.* 1603. “ Molagocodi. *H.*
Mal. vii. 25. t. 12. Piper nigrum, *offic.*” *Dale* 330. Round Black Pepper,
vulgo Black Spice.—It grows in Malacca, Java, Sumatra, &c. in the East-
 Indies; and, being a scandent plant, is set at the root of the areca, coco, and
 other trees, to climb upon them. The fruit grows in clusters, is first green,
 then red, and when dried in the sun black, such as we have it. *Vid. Lin. Gen.*
Pl. p. 17.

2. Piper

2. *Piper album. offic.* *Piper rotundum album. B. P. 412. R. H. 1342.* *Piper album. J.B. ii. 184. Ger. 1538. Park. 1603.* “*Piper album, offic. P. album leucopiper. Mont. Exot. 9.*” *Dale 331.* White Pepper.—This appears to be nothing but the Black Pepper decorticated; and hence is smooth, not wrinkled, and of a whitish colour, as brought to us. Yet, probably, there is a native White Pepper also. “*Inter plantam quæ Piper nigrum fert, & eam quæ candidum, tam exigua est differentia, ut a folis incolis discerni possint. . . . Candidi plantæ rariores sunt, nec nisi certis Malabar & Malaccæ locis raræ nascuntur. Solet magnatum mensis inferri: eo enim utuntur, quem admodum nos sale.*” *Garcias Clus. Exot. 182.* “*Ex Batavorum experientia cognoscitur, in ipsa planta album reddi, quod integræ uvæ Piperis albi, omnibus suis granis onustæ, ad nos adferantur.*” *Bod. in Theophr. p. 1183.* Although many authors are of a different opinion. *Vid. R. H. 1342. Miller’s Bot. 348. Savary’s Dict. ii. 1156.* “Black Pepper is the only spice we import directly from the East-Indies, all the others coming through the hands of the Dutch.” *Lewis’s Pharm. p. 53.*

3. *Piper longum. offic.* *Piper longum orientale. B. P. 412. H. Ox. iii. 602.* *Piper longum. J.B. ii. 185. Ger. 1539. Park. 1604. R. H. 1343.* “*Piper longum offic. Catta-tripali. H. Mal. vii. 27. l. 14.*” *Dale 286.* Long Pepper.—This is cylindrical, about the thickness of a goose-quill, and an inch and half long, resembling somewhat the catkins of *Hæfel*; of a greyish colour on the outside, whitish within; of an hot biting aromatic taste, and spicy smell. *Vid. Geoff. ii. 380.* It grows in Java, Malabar, Bengal, &c. on a climbing monopetalous plant. Several fruits like it are brought from America; but the oriental is the true Long-Pepper. *Vid. Savary’s Dict. ii. 1158.*

Hippocrates mentions an “*ἰνδικὸν ὁ καλεῖται οἱ περὶ πειπερί.*” *De Morb. Mul. l. 2. Ed. Foes. 672. lin. 14.* And the “*κοκκοὶ ἰνδικῆς φαρμάκων τῶν ὀφθαλμῶν ὁ καλεῖται πειπερί.*” *De Morb. Mul. l. 1. p. 630. l. 38.* “*Peperi fructus est; ejus genera duo. Unum rotundum, orobi modo, tegumine carneque confans, sicut laurina bacca nigrum. Alterum oblongum, subruffum, semina papaveris continens. Longe hoc validius altero. Ambo autem vim calefactoriam obtinent. Quamobrem contra cicutam auxiliantur.*” *Theophr. l. 9. c. 22. p. 1178.* Yet *Dioscorides*, l. 2. c. 189. p. 154. *Plin. l. 12. c. 7. p. 303. Galen Simpl. l. 8. fol. 58. B.* all believed the *Piper longum*, album, & nigrum, to be the fruit of one and the same tree, and to differ only in age, or ripening; the germinating cluster, unopened, being the long; and when opened, and near ripe, the white; which, being come to perfect maturity; became the black Pepper, which they most esteemed. “*Mirum videri potest posteriores Græcos id de hac planta & semine ignorasse, quod non nescivit antiquissimus Theophrastus. Sed Theophrastus temporibus vixit Alexandri Magni, qui Indos subegit. Potuerunt itaque melius Græci antiquiores naturam Piperis explorare, quod recentioribus non licuit.*” *Bod. in Theophr. p. 1183.* *Garcias* says the Long Pepper is called in Bengala *Pimpilim*. *Vid. Clus. Exot. 182.* where there is *Piperis albi uva ad vivum expressa*, which came home amongst some zingiber conditum. — 4. *Piper Jamaicense. offic.* *Piper odoratum Jamaicense nostratibus. R. H. 1507.* *Myrtus arborea aromatica foliis laurinis, Sloan. Cat. 161. Hist. 276. t. 171. Phil. Transf. N°. 192. p. 462. Raii Dendr. 33.* An cocculi Indi aromatici. *Grew. Rar. R. S. 211?* *Pimenta. offic.* *Caryophilus*

“*lus aromaticus Americanus, lauri acuminatis foliis, fructu orbiculari.*
 “*Pluken. Alm. 88. Phytog. 155.*” Dale 296. Jamaica Pepper, or All-Spice.
 —“It is a round umbilicated fruit, about as big as a juniper berry, of a
 “tough consistence, and brown colour, containing two dark-brown seeds,
 “of a pleasant aromatic smell and taste, between those of a clove and a nut-
 “meg. It grows in great plenty in Jamaica.” *Miller’s Bot.* 349. “Odore
 “& sapore aromatico, ad caryophyllos accedente.” Dale 296. “Pimenta is
 “of a fragrant aromatic smell, resembling a mixture of cinnamon, cloves, and
 “nutmegs.” *Lewis’s Pharm.* p. 54. “Sapore acriusculo, aromatico, ad cary-
 “ophyllos accedente.” *Geoff. ii.* 386. *è R.H.* “A sapore grato plurium spe-
 “cierum simul, omnia aromata apud Anglos dicitur; caryophylli enim aro-
 “matici, cinnamomi, & piperis saporem, sed mitiorem refert.” *Geoff. ii.* 388.

S E C T. II.

The first three are extremely hot and biting, like ginger and cloves; the fourth is milder, partaking somewhat of the nature of nutmegs.—All are strongly stimulating aromatics, and carminatives; called stomachic; and commended internally in flatulent and phlegmatic distempers, in palsies, colics, agues, &c. and externally as an apophlegmatism, errhine, sinapism, &c.

“Calfaciunt & siccant 3. incidunt, attenuant, aperiunt, resolvunt. *Ufus*
 “præcip. in frigiditate & cruditate ventriculi, colicis doloribus (præstat album)
 “in visus imbecillitate, (quia status discutit.)—Piper extrinsecus in apophleg-
 “matismis, gargarismis, sternutatoriis, sedat odontalgiam, columellam tu-
 “midam imminuit, nervorum affectus frigidos juvat. N. 1. Vis Piperis vola-
 “tilis valde est. Vitentur ergo præparationes in quibus volatile evanescit,
 “e. g. Extractorum Præparationes. N. 2. Vulgus Piper longum in paroxys-
 “mis febrium exhibere solet, id quod non nisi in principio locum habere po-
 “test. *Præp.* 1. Species diatrion Pipereon. 2. Tragea, seu species fortes.
 “3. Ol. Piperinum stillat. ex nigro. (N. Piper lbj. dat olei ʒj. circiter). Pa-
 “roxysmum tertianæ præcavet, si hor. 2. ante eum exhibeatur, purgato ta-
 “men corpore. Extrinsecus admiscetur inunctionibus dorsi in febribus.
 “Dosis gr. ii. iii. iv. &c. 4. Oleum de piperibus. *Schrod.* 649.

1. They are excessively hot, and cause a pretty lasting and uneasy glowing in the mouth; the black is the strongest, yet more used at the table than any other, I may say than all the other spices; and next to it the Jamaica pepper, which is the mildest. “Sapore fervido totum os & fauces adurens. Longum
 “gustu non cedit nigro vel albo, quanquam non statim apparente.” *J. B.*
 Hence they are commonly ordered to be swallowed whole: and because their heat is not thus so sensibly felt, some have imagined they rather cooled. *Vid. Hoffman.* p. 424. § 3 & 4. — 2. Although Pepper yields very little essential oil, yet it keeps well, and is not easily nor soon divested of its acrimony: yet to make an extract of it would be foolish.—3. Externally they heat, inflame, ulcerate, like pyrethrum: so are of use in lethargies, palsies, fixed pains, &c.
 —4. “Analyti chymica ex Piperis nigri lbiv. prodierunt liquorum lbj. ʒix. ʒj. gr. vj; salis vol. urinoli ʒj; olei ʒviij. ʒβ; carbonis lbj ʒij. ʒvj. gr. xvij. unde cinerum ʒij. ʒvj. gr. xxiv. ac inde salis fixi alcali ʒj. ʒij gr. xii. (ergo terræ ʒij.

3ij. 3iij. gr. xij.) & jactura fuit lbj. 3iv. gr. xlvij." secundum *Geoff.* ii. 381. But here the sum produced and the loss is lbiv. 3viiij. 31ß. so that there are 3viiij. 31ß. too much. He also makes 3xiv. 3vi. gr. xvij. consumed in calcination; but there is 3j. and gr. xlvij. more: so that there are in all 3xiv. 3vij. gr. lxvi. Here then are two palpable errors. Besides the quantity of oil, fixed salt, earth, and especially the loss, are extraordinary. "Verum Piperis nigri lbvj. in aqua communi per sex dies maceratae & postea destillatae, præbuerunt olei essentialis, Piperis odorem spirantis, saporis acris, sed non admodum intensi 3iij. Aqua cui innatabat oleum, Piperis odore perfusa erat, et acri sapore imbuta, et sublimati corrosivi solutionem turbidam et lactescentem efficiebat: grana vero macerata multum de suo sapore perdiderunt." *Geoff.* ii. 381. "Geoffroy relates thirty-six (it is an error for thirty-two) ounces of well chosen black pepper, being macerated in water for six days, and afterwards distilled, yielded 3j. of an aromatic oil. . . . Spirit of wine seems entirely to extract all the pungency and heat of this spice; so that a few drops of a tincture made with it (which is of a dark brown colour) sets the mouth, as it were, in a flame. *Lewis's Pharm.* p. 53. "Pimenta, per vesicam destillata oleum essentielle odore gratum reddit, quod in aqua fundum petit." *Geoff.* ii. 1388.—

S E C T. III.

Either of these sorts may be given in substance to gr. v. or vi; in infusion to gr. x. or xii. The black pepper is used in the pulvis antilyssus, theriaca Andromachi, (ergo et aq. theriacalis) et emplastrum epispasticum: Piper album in the mithridatium et theriaca: and the Piper longum in the tinctura salutifera, mithridatium et theriaca. There is an aqua Piperis Jamaicensis in the *New London Dispensatory*. "Piperis dosis in substantia a gr. i. ad x; infusi "ad 3j." *Geoff.* ii. 384.—

L E C T U R E LXVII.

P I S T A C I A .

S E C T. I.

PISTACIA, Nux Pistacia. *offic.* Pistacia peregrina fructu racemoso, sive terebinthus Indica Theophrasti. *B. P.* 401. Pistacia. *Dod.* 817. *J. B.* i. 275. *Ger.* 1436. *R. H.* 1682. Nux Pistacia. *Park.* 1416. Terebinthus Indica Theophrasti, est Pistachia Dioscoridis. *Lob. Adv.* 413. Terebinthus Indica Theophrasti, Pistachia Dioscoridis. *Lob. Adv.* 413. *T.* 580. *J. B.* ii. 173. In *H. Cliff.* non invenio. The Pistachio or Fistick-nut Tree.

The fruit of this tree is about the size of small hazel nuts, covered with a thin wrinkled skin, green on one side and red on the other, under which is a white, thin, tough shell, containing, in a reddish membrane, a green oily kernel,

nel, of a very pleasant sweet taste.—It grows in Syria, Persia, Africa, &c. The kernel is used, and more at the tables of the rich than in the shops. “Fructus dicuntur πιστακία; Nicandro πιστακία; Possidonio, monente Athenæo, βιστακία: Latinis Pistacia: Officinis & Barbaris Fistici.” *B. P.* According to Athenæus, the name is Syriac originally. Vid. *Bod. in Theoph.* p. 359. It was first brought into Italy by L. Vitellius in the reign of Tiberius. Vid. *Plin.* l. 15. c. 19. p. 368. and l. 15. c. 22. p. 369. *Dioscor.* l. 1. c. 177. p. 83. compares them only to the pine-nuts; but *Theophrastus*, l. 4. c. 5. p. 347. describes sufficiently the Terebinthus Indica, to shew that it is our Pistacia. The tree is Pistacia, æ; the fruit Pistacium, properly. They come from Turkey.

S E C T. II.

They are antacid and nourishing, like sweet almonds; called pectoral and restorative; and commended in coughs, consumptions, frigidity, &c.

“Calfaciunt 2. siccant 1. attenuant, aperiunt. *Usus præcipui* in mucilagine pulmonum, obstructione epatis; roborant stomachum; arcent nauseam ac vomitum; excitant appetitum; bonum suppeditant nutrimentum. *Præp.* “Oleum, exprimitur ex nucleis.” *Schrod.* p. 650. Pistacia, quæ quidem in Syria gignuntur, pineis nucibus similia, stomacho amica sunt. Sive porro edantur, sive trita ex vino bibantur, contra serpentium morsus auxiliantur.” *Dioscor.* l. 1. c. 177.

The outer skin smells of turpentine, as the tree is said by incision to yield a juice like it. Vid. *Savary's Dict.* iii. 2, 413. The kernels are oily and farinaceous, and might be used in emulsion (as Mr. *Geoff.* ii. 418. says they are prescribed) were it not for their colour. “Apprime nutrire & Venerem stimulare recentiores plerique volunt. Quibus de causis bellariis instaurantibus & reficientibus admiscuntur, ab Hispanis, Italis, Gallis, ut vix ullum sit analepticum sine Pistacio. C. Hoffmannus e contra fidenter affirmat falsam esse opinionem de πολυτροφία, quinimo æstuosa esse ait, in calidioribus, non minus quam amygdalas. At Venerem augent, & maximus eorum usus est in Italia, teste Brasavolo. Quicquid faciunt, flatuando faciunt, ob excrementitiâ humiditatem. Hactenus Hoffman: cui oppono quotidiana experientiam, &c.” Vid. *R. H. and Hoffman.* p. 401.

P R U N A.

S E C T. I.

Prunus, *Prunus sativa*. *offic.* *Prunus.* *B. P.* 443. *Dod.* 804. *J. B.* i. 184. *Park.* 1512. *Pruna domestica.* *Lob.* 595. *Ger.* 1497. *Pruna sativa*, *R. H.* 1526. *Prunus inermis*, foliis lanceolato-ovatis. *H. Cliff.* 186. The Plum-tree.—But there being a great variety of the fruit of this tree (coluntur species 31. *Lugd. B.* ii. 241.) there may be many sorts of dried Prunes. There are in our Dispensatory only two, viz.

1. Pruna

1. Pruna Damascena, *off.* which are the dried fruit (according to *Dale* 304.) of the *Prunus fructu magno, dulci atro-cœruleo*. *T.* 622. Pruna magna dulcia, atro-cœrulea. *B. P.* 443. The Damask Prunes or Plums; though they are never brought from Damascus, but from France, if we have any of them.

2. Pruna Gallica. *off.* Pruna parva dulcia atro-cœrulea. *B. P.* 443. Prunus fructu parvo dulci atro-cœruleo. *T.* 622. Common or French Prunes.—“Hæc nucleum parvum, non multo ceraso majorem habent, & a nostris Damascenula vocantur. Pruna Damascena nostratia, Bellon.” *B. P.* Are these the Pruna Gallica *Pb. Londinensis*? “Palma datur Damascenis, sed in officinis nostris raro inveniuntur; eorum autem loco Gallica usurpantur.” *Dale* 304. “The best Plums or Prunes being formerly brought from Damascus, the fruit has kept that name, though it is seldom or never brought from thence now, we making use of the Pruna Gallica. *offic.* which I take to be the fruit of the Pruna Damascena, *Ger.*” *Miller’s Bot.* 359. Vid. *R. H.* 1526; where he says the Pruna Damascena of the shops are much the same with the Pruna Damascena *J. B.* which are not different from the Pruna parva dulcia atro-cœrulea *B. P.* except that they are valde acida. But there are dried in France several sorts of Prunes: for which see *Savary’s Diet.* ii. 1238.—There are sometimes brought also from France,

3. Pruna Brignolensia, *off.* Pruna ex flavo rufescentia, mixti saporis, gratissima. *B. P.* 443. Prunus Brignoniensis fructu suavissimo. *T.* 623. Prunellos, Pruna Briolensia aut Brignolensia. *R. H.* 1526. They are so called from *Brignols*, a town of *Provence*. “*Ufu*: fructus seu Pruna colore ex flavo rufescentia, enucleata, & exsiccata, sapore suavissima.” *Dale* 304. Vid. *R. H.* “l. c. They are used as a sweet-meat. “They are seldom prescribed by physicians; but being of a pleasant grateful taste, and not apt to purge, “they are frequently eaten by persons in fevers.” *Miller’s Bot.* 360.

Prunus arbor, *Gr.* κοκκυμηλαι: fructus, Pruna κοκκυμηλα. Vid. *Dioscorides*, l. i. c. 174. p. 82. vel infra.

S E C T. II.

They are antiseptic and gently purgative, (perhaps also subastringent); and commended in ardent and putrid fevers, and wherever heat, thirst, or bilious acrimony offend; much used in purgative decoctions, laxative ptisans, and electuaries, &c. They may be given to ounces: and are in the electuarius lenitivum.

“Pruna naturâ refrigerant & humectant. Recentia cruda emolliunt alvum quidem, verum facile putrescunt, & proin minus commode (imprimis post cibum) esitantur, maxime si immoderatio usus sit. Pruna Damascena esui aptiora sunt, laxant, acrimoniam humorum obtundunt, linguam (macerata ac frigida in ore retenta) humectant, sitim extinguunt. Pruneola, (seu Prunella dicta) refrigerant magis quam reliqua, humectantque sed citra alvi commotionem, adeoque esui aptiora censentur, gratumque refrigerium in febribus exhibent. *Præp.* 1. Condita Pruna. 2. Pulpa Prunorum. 3. Electuarius diaprunis simpl. 4. Diaprunum compositum. 5. Diaprunum non laxativum.” *Schrod.* 656.

For they are of a subacid pleasant sweet taste, but little smell. Unripe plums are sour and styptic; the ripe more sweet, and still more so when dried; when they are less apt to cause diarrhoeas. “*Prunus nota arbor est, cujus fructus esculentus est, sed stomachum male habet, alvumque molli- At Syriacarum & earum maxime quæ Damasci nascuntur fructus exiccatus stomacho utilis est, alvumque astringit.*” *Dioscor.* l. c. “*Pruni sativæ fructus ventrem subducit, recens plus, aridus minus. Pruna Damascena etiam ventrem subducunt, minus tamen quam quæ importantur ex Iberia,*” *Galen Simpl.* l. 7. p. 51. H.

S E B E S T E N A.

S E C T. I.

Sebestena, Myxa, Myxaria. *off.* Sebestena domestica; an ἀμαμαξίς Athenæo? *B. P.* 446. Myxa domestica, five Sebesten. *J. B.* i. 197. Myxa. *Dod.* 806. Sebestena, Myxa, five Myxaria. *Ger.* 1499. Myxos, five Sebesten. *Park.* 252. Myxa, five Sebesten. *J. B. R. H.* 1563. Myxa. *Dod. B. J.* ii. 246. “*Sebesten. offic.* Prunus Malabarica fructu racemoso, calyce excepto.” *R. H.* 1563. Vidimaram. *H. Mal.* iv. 77. t. 37.” *Dale* 297. Vid. *H. Eltham.* p. 340. t. 255. The Sebesten, or Assyrian Plum-tree.—It grows in Egypt, Syria, &c. The fruit only is used; and that but seldom. It is a small wrinkled plum, of a blackish colour; containing in a sweet viscous pulp a triangular stone. “It is the fruit of a tree like a plum-tree, that grows in Egypt and Assyria, from whence they used formerly to be brought for our use; but for these many years they have been quite strangers to our shops.” *Miller’s Bot.* 405. “Item Pruna in Damasco monte nata, & Myxa; utrumque jam familiare Italiæ: ex Myxis in Ægypto & vina fiunt.” *Plin.* l. 13. c. 5. p. 322. “Simul dici possunt populares eorum Myxæ, quæ & ipsæ nunc cœpere Romæ nasci insitæ forbis.” *Plin.* l. 15. c. 13. p. 362. “Myxa fructus arboris est primo (pruno) quidem minor facultate tamen perfimilis.” *Paulus*, l. 17. p. 634. “Prunus Sebesten a Dioscoride & Galeno præteritur. At Ægineta, Ætius, & Actuarius frequenter meminere. Dicitur μύκος, fructus vero μυξαι, μυξα, μυξαρία, a pomi mucoso lentore. Græci enim mucum μυξαν vocant. Arabibus & officinis Sebesten.” *B. P.* Myrepsus writes it συμπεστειν. *Antidot.* sect. 1. c. 99. p. 383. “Sebesten Arabibus dicta est, vel αρεβαστος Augustus; vel a Sebastia, Samariæ metropoli, ubi olim crescebat.” *R. H.* 1563.

S E C T. II.

They are antacid and incrassating; called pectoral; and commended internally in coughs, heat of urine, &c. and externally as emollient and anodyne. They are more viscous than jujubes; but may be used the same way.

“Sebesten inter caliditatem & frigiditatem temperata sunt; humectant, e-
“ molliunt, acrimoniam humorum obtundunt. *Ufus* præcip. in catarrhis acri-
“ bus,

“bus, urina acri, febris biliosis, alvi obstructione. Summatim, ut figura, ita & viribus Pruna Damascena æmulantur. *Præp.* Electuarium de Sebesten. Purgat leniter, obtunditque acrimoniam humorum. Dosis ab ʒʒ ad ʒij.” *Schred.* 680.

1. They are very sweet, and so viscous that good birdlime is made of them in Egypt, as Alpinus and others write. Hence they are very different from prunes, figs, dates, yea and jujubes too; and are much more antacid, and also incrassating. With this viscum they pretend in Egypt to discuss even scirrhi: there it is also taken with pulvis glycyrrhizæ and sugar, for coughs. —

2. The pulp is commended also in asthmas, hoarseness, pleurisy, peripneumony, bilious fevers, costiveness, &c. Vid. *R. H.* 1556. “Eorum pulpa ʒx. pondere devorata, aut ad summum xii. eisdem fere præbet effectus quos Ægyptia Siliqua, Cassia vocata.” *Matthiæ.* p. 218. *Vix credo.*

“Analyti chymica ex pulpæ Sebesten cum corticibus membranosis lbij. ʒxiv. per B. V. distillatæ sunt humorum ʒxxiiʒ ʒʒ. Jactura fuit ʒij. ʒiiiiʒ. & massa residua lbij. ʒvij. (sum lbij. ʒix. ʒvij. so that ʒiv. ʒj. were deficient) quæ per retortam distillata præbuit liquoris ʒxiv. ʒvij. gr. xviii; olei ʒij. ʒvj. gr. xviii; carbonis ʒxiiij. ʒij, unde cinerum ʒij. ʒvij. & inde salis alcali acerrimi ʒj. ʒvj. (ergo terræ ʒix.) ac jactura fuit ʒj. ʒvij. (sum lbij. ʒvij. gr. iv. gr. iv. too much.) “Ex hac analysi liquet Sebesten componi ex partibus oleosis, salino-acidis, & terrestribus, inter se adeo intime conjunctis, ut exinde mistum dulce & glutinosum exurgat (*i. e.* that it is a vegetable, sweet and glutinous) magis lentum esse tenax quam jujubæ, ob majorem olei quantitatem: (compare the analysis althææ & symphiti:) majorem quoque salis alcali, tum volatilis, tum fixi copiam præbet; & ab his salibus pendet vis attenuandi & resolvendi, qua Sebesten donantur.” Thus *Geoff.* ii. 313. who is right enough as to the virtues. But they incrassate.

S I L I Q U A.

S E C T. I.

Siliqua, Siliqua dulcis, Caroba, Ceratia. *offic.* Siliqua edulis, *B. P.* 402. *T.* 578. Ceratonia. *Dod.* 787. Siliquæ arbor, sive Ceratia. *J. B.* 1, 2, 413. *R. H.* 1718. Ceratia, Siliqua, sive Ceratonia. *Ger.* 1429. Siliqua dulcis, sive vulgator. *Park.* 236. Ceratonia. *Lin. G. Pl.* p. 475. *H. Cliff.* 75. The Carob-tree—The fruit whereof is a three or four inch long, one inch broad, and $\frac{1}{4}$ inch thick pod, of a reddish-brown colour, in proper cells within a pretty thick and solid substance; of a sweet taste, with yellowish brown seeds. The husk only is eatable.

It grows in Naples, Sicily, &c. in great plenty, and, as some say, in Palestine, particularly in the mountains about Jerusalem. “Veslingius paucas harum arborum in Ægypto vidit, frequentiores in Palæstina, plurimas in Judææ montibus, & circa sacram ibidem urbem.” *R. H.* 1718. The Germans and Dutch know no other name for it, in their language, but St. John’s bread. Vid. *Dcd.* 787. And it is the opinion of some commentators that the locusts, *argolis*, on which the Baptist fed was a vegetable not animal food. Vide

Ham-

Hammond's Annot. on Matth. iii. v. 4. "Siliquæ olim vilissimorum hominum
"cibus erat & suum, ut patet ex similitudine filii prodigi." *Luc. xv. v. 16.*
(where the husks, on which the swine fed, are called in the original κεραια.)
Hoffman. p. 446.

"Κεραια. i. e. Siliqua, a corniculorum similitudine, a Dioscoride, l. 1. c. 158.
"qui eam non descripsit: a Galeno & Ægineta vero, κεραιωνια, quasi cor-
"nuta siliqua, hæc arbor appellatur: a recentioribus Græcis Xylocerata: Ara-
"bibus Charnub: a Plinio, l. 15. c. 24. Siliqua (quia semen fert in siliqua
"leguminum modo), de qua hæc; haud procul abesse videntur & prædulces
"siliquæ, nisi quod cortex in iis manditur: digitorum hominis longitudo illis,
"interim falcatis, pollicari latitudine, &c." *B. P. 402.* In Egypt it is called
Carub, or Canub. Vid. *Alpin. de Pl. Æg. cap. 3. p. 8.*

S E C T. II.

It is antacid and purgative; called pectoral and astringent; and commended
for coughs, heartburn, heat of urine, &c. but never used here. Cum cassia
convenit.—"Officin. Fructus (scil. siliquæ) cujus succus melligenus in usum
"solum venit. Vires. siccatur & astringit. Ufus præcip. in ardore stomachi,
"tussi, &c. alias concoctus est difficilis." *Schrod. 684.*

It is a sweet and eatable husk. "Callus dulcis & edulis est." *J. B.* In
Egypt they extract from it a mel dulcissimum, with which they not only pre-
serve several sorts of fruits, but which they also use much in clysters: "Aliqui
"etiam per os sumendum concedunt ad subducendam alvum: ipso etenim al-
"vus, non minus quam pulpa cassiæ ibi ad excretionem movetur." More-
over they use it (as also a decoction of the siliquæ) for inflammations of the
kidneys, coughs, asthmas; "valdeque ipsos juvat." Vid. *Alpin. l. c.* Diof-
corides, l. 1. c. 158. p. 79. says, "Siliquæ recentes (χλωρα) alvum solvunt;
"siccatae sistunt." Also *Galen Simpl. l. 7. p. 51.* says, "Ceratonium humida
"ventrem subducunt, sicca sistunt." And this has been the generally received
opinion: but Mr. Ray found it otherwise by his own experience. "Quam-
"vis omnes qui de his fructibus scripserunt, siccatos alvum sistere affirmant,
"nobis tamen contrarium evenit: siquidem quotquot Venetiis de iis comedi-
"mus, non solum nauseam moverunt, sed & alvum subduxerunt, non secus
"ac pulpa cassiæ, ita ut ventriculus postea ab iis abhorreret." *R. H. 1718.*

T A M A R I N D I.

S E C T. I.

Tamarindus. offic. Siliqua Arabica, quæ Tamarindus. *B. P. 403.* Tama-
rindus. *R. H. 1748. T. 660. Ger. 607. Park. 217.* Tamarindi. *J. B. 1, 2,*
422. Marq. Brasil. 107. Tamarindus Derelside vocata, *Alpin. Æg. 35.* Bu-
lam-pulli, sive Maderam-pulli. *H. Mal. i. 39. t. 23. Lin. G. Pl. p. 20.*
H. Cliff. 18. The Tamarind-tree.

It

It grows in Arabia, Africa, both the Indies, &c. The pulp of the fruit only is used; which, as it is brought to us, is soft, of a brownish black colour, and very acid taste, intermixed with stringy fibres, membranes, and large seeds. It is a beautiful tall tree, easily raised on a hot bed, but difficultly preserved through the winter. Vid. *R. H.* 1748. "The Tamarinds brought from East-India are darker and dryer, but contain more pulp, being preserved without sugar, and fitter to be put into medicines; those from the West-Indies are redder, and have less pulp, and are preserved with sugar, and so pleasanter to be eaten as they are." *Miller's Bot.* 431.

"Ab Arabibus Tamarindus nominata, quasi dicas dactylos Indos, sive palmas Indicas: tamar enim illis dactylum significat; licet arbor palmæ similis non sit, nec ex palmarum generibus, nisi ad fructus effigiem, quæ dactylum, sive digitum inflexum refert, respexerint." *B. P.* 403. "Arabibus Tamarhendi dictum fuit, quasi fructus Indicus: vox enim tamar late sumpta fructum omnem significat. Male ergo a quibusdam Arabum interpretibus, palmula Indica & dactylus Indicus dicitur, cum & fructus & arbor, a dactylis, & a palma arbore longe discrepent." *Geoff.* ii. 355. But why should it be termed fructus or dactylus Indicus by the Arabs, since it grows in Arabia?" "Assertur non integer, sed contusus. . . Garzias ait sale condiri, Alpinus saccharo. Debent servari in vase stricti oris: quo modo durant apud nos per triennium." *Hoffman.* p. 75.

S E C T. II.

It is an acid antiseptic, and laxative fruit; said to be cholagogue; and commended in hot, putrid, and pestilential diseases, in the jaundice, scurvy, gonorrhœa, &c. Dose to $\mathfrak{z}\text{ij}$. in pulp. "*Officin.* Dactyli acidi (dicuntur & $\delta\acute{\alpha}\tau\tau\epsilon\iota\mu\alpha$ palmulæ acidæ). *Vires.* Refrigerant & siccant 2. humorum acrimoniam & fervorem reprimunt, bilem ac adustos humores blande ducunt, siti succurrunt. Dosis a $\mathfrak{z}\text{ij}$. ad $\mathfrak{z}\text{ix}$. in decocto. (alii $\mathfrak{z}\beta$ ad $\mathfrak{z}\text{ij}$.) N. parum nutrimenti subministrant. *Præp.* Pulpa Tamarindorum. Dosis ad $\mathfrak{z}\text{ij}$. ad $\mathfrak{z}\text{ij}$. Electuarium diaphænicum." Vid. *D. Schred.* 777.

They are of a very acid yet pleasant taste. "Acidi saporis gratissimi." *R. H.* "Saporis subacidi." *Herman. Cynof.* p. 353. "Pulpa acida, vinosa, & subacris." *Geoff.* ii. 357. and are of great use in hot climates and seasons; as the Turks, Arabs, &c. find, especially when travelling through the parched deserts: they give them also in ardent and putrid fevers, plague, &c. in decoction. Tamarinds also improve much the taste of the more nauseous, as well as correct the acrimony of the more rugged cathartics. "Tartarus etiam ex horum pulpa paratur." *Herm. Cynof.* p. 354. sed malè.

"Tamarindorum sal essentialis a cremore tartari non differt: saporis enim est acidi, nec nisi in aqua fervente solvitur. Post digestionem aliquot dierum, ex Tamarindis extrahitur spiritus aceto distillato non absimilis. . . Pulpa exhibetur a $\mathfrak{z}\text{ij}$. ad $\mathfrak{z}\text{j}$. (nonne pro $\mathfrak{z}\text{ij}$?) infusa vel decocta ad $\mathfrak{z}\text{ij}$." *Geoff.* ii. 357.

Z I N G I.

S E C T. I.

Zingi, Anisum Indicum. *offic.* Anisum peregrinum. *B. P.* 159. Anisum Phillippinarum insularum. *Clus. H.* ii. 202. Zingi, fructus stellatus, five Anisum Indicum. *J. B.* i. 485. *R. H.* 1835. Anisum Indicum stellatum. *Ger.* 1035. Anisum exoticum: Phillippinarum insularum. *Park.* 1569. "Anisum Indicum stellatum, Badian dictum. *offic.* Cardamomum, Siberyense Pata-vinorum Paul. Amann. *H. Bosian.*" *Geoff.* ii. 469. Fœniculum Sinense, *Redi's Exp. Nat.* ii. 136. Anisum Indicum *offic.* *Dale* 177. Indian or Stellate Anise.—This is a fruit consisting of (six or) eight capsules, placed starways; each of which open above, and generally contain a pretty large smooth seed, of a warm aromatic taste and fragrant smell, like anise: they are sometimes empty. It was brought from the Philippines by Mr. Thomas Candish, in his voyage round the world; and sent by Mr. Morgan and James Garret to Clusius (who first described it) a few years after. Capt. Candish set out in July 1586, and returned in September 1588. The tree is the *Euonymo ad finis Phillippinarum insularum*, Anisum spirans, nucas in capsulis stelliformiter congestis proferens. *Pluken. Almag.* 140? "Ex India orientali ad nos transportatur." *Dale* 177. "Ex Tartaria, Sina, & Philippinis Insulis affertur." *Geoff.* ii. 470.

S E C T. II.

It has the virtues of sweet fennel and anise seeds; but is somewhat more acrid: and is chiefly commended as cordial and carminative.

"Iisdem viribus donatur ac Anisum & Fœniculum, imo præstantioribus. Ventriculum roborat, flatus discutit, & urinas promovet. Sinenses illud, cum radice Ninzin aquæ calidæ infundunt, infusionemque in modum theæ bibunt, ad viscera roboranda, vires labantes resarciendas spiritusque recreandos. Plurimi cum potu theæ, coffe, &c. permiscunt ad gratiam ipsi conciliandam. Hodie spiritus ardens cum hoc fructu ab Indis præparatur, Anis, Arak, Batavis dictus & plurimi æstimatus." *Geoff.* ii. 470. For it tastes and smells like them. "Odor & sapor Anisi plane est; relinquit tamen nescio quid acrimoniæ in lingua commansus." *J. B. R. H.* "Radii stellæ non multum a Fœniculi dulcis sapore abeunt, sed ita ut minus acutus ille sapor sit, & quandam Anisi misturam referat." *Redi*, l. c. There is nothing said of its virtues in *R. H.* nor *Dale*: nor has it been received into *our Pharmacopœia*. "Contra multas infirmitates prodesse prædicant. Ego vero illud Fœniculum nostras, nec non Anisum, Daucum, & Cuminum virtute parum superare deprehendo." *Redi*, l. c.

On various MEDICINAL SEEDS.

L E C T U R E LXVIII.

A B E L M O S C H.

S E C T. I.

B A M I A moschata, Semen moschi. *off.* Alcea Ægyptiaca villosa. *B. P.* 317. *R. H.* 1066. Belmuscus Ægyptiaca, Honorio Bello. *J. B.* ii. 960. Mosch, *i. e.* Bamia muschata. *A. p. Exot.* 197. Alcea Ægyptiaca moschata. *Park.* 301. Althæa Ægyptiaca moschata, Abelmosch dicta. *H. Ox.* ii. 533. Abelmosch vulgò. *H. L.* 25. Ketmia Ægyptiaca semine moschato. *T.* 100. Bamia moschata. *offic.* Dale 192. Hibiscus, foliis pellato-cordatis, septangularibus, ferratis, hispidis. *H. Cliff.* 349. Mosch seed, Musk mallows.

It grows in Egypt, Malabar, Jamaica, Brasil, &c. The seed only is used: it is shaped like a kidney, gray, striated, of a hot bitterish taste, and sweet musky smell. With it the Arabs are said to adulterate Musk.

“ Ab-el-mosch, & simpliciter mosch, non bel-mosch, semen autem aspiratione adauctum. Hab-el-mosch, *i. e.* granum Moschi ab Arabibus appellatur.” *R. H.*

S E C T. II.

It is aromatic, and reckoned cephalic and cordial; and is used in some countries as a perfume, and to improve the flavour of coffee: but here it is not used at all.

“ Seminis leviter exiccati pulverim coavæ admiscet Ægyptii, ut roborandi capitis, ventriculi, cordisque, majorem acquireret efficaciam. Sabetis etiam intemperant, salubri effectu, quibus sumptuum tenuitas ambraë moschive usum denegavit.” *R. H.* 1066. “ It smells both of Musk and of Amber-grise; is much used in Italy as a perfume; and in France the religiouses make beads of it.” *Vid. Savary's Dict.* i. 3.

A G N U S.

S E C T. I.

Agnus castus, Vitex. *offic.* Vitex, foliis angustioribus, cannabis modo dispositis. *B. P.* 475. *T.* 603. Vitex. *Dod.* 774. *H. Cliff.* 327. V. five Agnus castus. *Ger.* 1387. V. five Agnus castus, folio angusto. *Park.* 143. Agnus folio non serrato. *J. B.* 1, 2, 205. *R. H.* 1696. The Chaste-tree.

It grows in Naples, Sicily, &c. flowering in August. The seeds are round, smaller than pepper, of a blackish gray colour, in hoary calyces, of an acrid aromatic taste, and strongly fragrant smell, like that of stœchas Arabica.

“ Agnos (*i. e.* castus) nominatur, quod in Thosmophoriis (*i. e.* sacris Cereis) matronæ castitatem custodientes, eo ad strata uterentur: Lygos vero (quasi vimen) propter virgarum ipsius firmitatem.” *Dioscor.* l. 1. c. 135. p. 70. *Galen Simpl.* 6. p. 40. H. “ Verisimile est *ἀγνος* dici, quasi *ἀγνός*, quod libidine advesetur. . . Monachi quidam severunt in cœnobiis suis, pro cingulo utentes. Serapio piper monachorum appellat. *Hoffman.* p. 91.

S E C T. II.

It is a stimulating aromatic, or an attenuating diaphoretic, and diuretic; called antaphrodisiac; and is commended internally ad castitatem tuendam, & impetus Venereos reprimendos; but with better reason in obstructis mensibus, flatulent colics, hysteric fits, &c. and externally as discutient. It may be given to ʒj.

“ Semen calfacit & siccatur insigniter, discutit, menses ciet, appetitus Venereos cohibet, semen imminuit. *Præp. Trochisci.*” *Schrod.* 528—It is acrid and aromatic, even when twenty years old; so well does it keep. “ Grana saporis acris.” *J. B. R. H.* “ Semen saporis acris, subastringentis, exsiccantis.” *Dale* 297. & *Geoff.* iii. 44. “ Odoris & saporis piperacei, debilioris.” *Nucl. Belg.* p. 9. “ They are of a hot astringent taste.” *Miller’s Bot.* 19. Seminum thea, though it tastes somewhat drying, yet does not turn black with a solution of vitriol: hence it appears to strengthen only by stimulating. It is such an antivenereal as ruta, or camphora, which in smell it somewhat resembles. “ Nonnullos reperiri licet, qui in Venerem, viticis usu, exagitantur.” *S. Paulli Q. B.* p. 189. Vid. *Dioscorides.*

“ Analyti chymica ex Agni fructuum recentium lbj. prodierunt humorum ʒx. ʒij. gr. xvij; olei ʒiv. gr. liv; carbonis ʒix. ʒvij. unde cinerum ʒj. ʒij, ac inde salis fixi alcali xij. gr. xij. (ergo terræ ʒvij. gr. lx.) & jactura fuit ʒvij. ʒvj,” secundum *Geoff.* iii. 45. who adds, “ Per hanc analysim liquet, Agni semina partibus tenuibus & volatilibus copiosis donari, quandoquidem dum distillantur, totius fere quarta pars in auras avolat; quam quidem non solæ alcalinæ urinosæ particulæ, sed etiam acidæ & oleosæ tenues constituent. . . Deinde multum olei continent, quod totius dimidium superat; acidi salis portionem non mediocrem, & aliquantulum ammoniacalis salis, paucillum vero terræ.” How does it appear to have so much oil, or acid salt? Is the jactura of any thing but of air? Surely neither urinous nor acid nor oily particles can escape through close vessels.

ALTHÆA. Vide p. 361. vol. I.

A M M I.

S E C T. I.

1. Ammi, Ammi vulgare. *off.* Ammi majus. *B. P.* 159. *T.* 304. Ammi vulgare. *Dod.* 301. *Ger.* 1036. *R. H.* 455. Ammi vulgatus, an Bubonium

nium Hippocratis? *Leb.* 415. *Ammi vulgatus. Park.* 912. *Ammi vulgare majus*; latioribus foliis, femine minus odorato. *J.B.* iii. 2, 27. *H.Ox.* iii. 295. *Ammi annuum. M.U.* 21. *Ammi laciniis foliorum caulis lanceolatis. H.Cliff.* 19. Common Bishops-weed.

The seed is smaller than parsley seed, striated, of a grayish-brown colour, of a bitterish hot taste, and pretty fragrant smell. It grows wild in Italy, Sicily, &c. and the seed ripens here if early sown. "Parkinson affirms that it grew wild about Greenhith in Kent, but it has been found by no body since his days." *Miller's Bot.* p. 30.

2. *Ammi verum. offic.* *Ammi alterum, femine apii. B.P.* 159. *Ammi odore origani. J.B.* iii. 2, 25. *R.H.* 455. *H.Ox.* iii. 295. *Ammi Creticum. Ger.* 1036. *Park.* 912. True Bishops-weed.—This seed is slenderer than the former, and more fragrant and aromatic. "Ex Alexandria Ægypti adfertur. *Ufu.* Semina parva, striata, petroselinio minora, e rufo spadicea, saporis acris aromatici, odoris fragrantis, ad origanum accedentis. In officinis nostris raro aut nunquam inveniuntur." *Dale* 128. "This is rarely to be met with in the shops, the former supplying its place; it used formerly to be brought from Turkey." *Miller's Bot.* 30.

"*Ammi* nonnulli Æthiopicum aliqui regium Cuminum appellant; alii alterius naturæ Æthiopicum Cuminum; & alterius *Ammi* esse prodiderunt. Vulgo notum est semen exile, multo minus Cumino, & origani sapore." *Dioscor.* l. 3. c. 70. p. 202. "Est Cumino simillimum quod Græci vocant *Ammi*. Quidam vero Æthiopicum Cuminum id esse existimant. Hippocrates regium appellat, videlicet, quia efficacius in Ægypto judicavit. Plerique alterius naturæ in totum putant, quoniam sit exilius & candidius; similis autem & huic usus." *Plin.* l. 20. c. 15. p. 527.

S E C T. II.

They are attenuant, diuretic, & carminative; and commended in obstructions of urine and the menses, flatulent colics, sterility, &c. The common agrees with sem. apii: the true with origanum. Dosis ad ʒj. The vulgare is but a bad succedaneum to the verum.

"*Ammi verum* calfacit & siccat gr. 1. tenuium partium est, incidit, aperit, discutit. Hinc convenit dolori colico & uterino, in mensibus & urina obstructis, in inflatione ventriculi; ususque præcipue interni est, hinc & externi." *Schrod.* 531. "Miscetur & cutim erodentibus medicamentis (ἐκ δ' οξείας) e cantharide paratis, quo resistat urinæ difficultatibus, quæ alioqui id genus medicamentis supervenire solent, &c." *Diosc.* l. 3. c. 70. p. 202. —1. The *Ammi verum* is very hot, aromatic and bitterish, with the flavour and smell of origanum. "Odore, si terantur folia, admodum aromatico origani sapore non dissimili." *J.B. R.H.* "Semina saporis acris, aromatici, quasi ex pipere & cumino compositi, odoris fragrantis ad origanum accedentis." *Herman. Cynof.* p. 263. "Saporis acris, aromatici, odoris fragrantis ad origanum accedentis." *Dale* 128. But the *Ammi vulgare* is not near so hot or biting, being only a little bitterish, with the flavour of smallage, and not very fragrant. "Semen ignavius Cretico." *R.H.* "Saporis amari-

“cantis, acris; odoris fragrantis.” *Dale* 128. “Saporis amari acris, odoris fragrantis.” *Herm. Cynof.* p. 268. Whence N. B. it appears that this is a bad substitute for the Verum; which—2. is much commended for barrenness in women. “Siquidem, says *Matthiolum* (p. 557.) si propinetur mane, ex vino meraco, aut carniū jure (in tenuem pulv. redact.) 3j. alternis diebus, quater vel quinquies, tribus horis ante cibum, futuram pollicetur prolem.” And *S. Paulli Q. B.* p. 195. directs an uterine clyster, and compound powder, in which the Ammi V. is an ingredient, which he recommended “multis sterilibus novis nuptis, quæ in graviditate & a fluore albo liberatæ fuere!

Sem. Ammeos is in the Theriaca: *Veri* should be added in our Pharm. because we have among the simples both Ammi Verum and Vulgare. The *London M. M.* has thrown out the Verum; and Mr. *Geoffroy* has forgotten them both. Is the Ammi alterum semine apii. *B. P.* a species Ammeos T? Nescio. Is the seed of this plant certainly the Ammi Verum *off.*? I cannot say it is; though *Dale*, whom I have followed, makes it so; as does also the *London Pharm.* edit. 1721. But the Ammi Verum, *Gesn. Hort.* is the Ammi parvum, foliis fœniculi, *B. P.* 159; fœniculum annuum origani odore. *T.* 312. (which is one of the Ammis in the *Cod. Medic.*); Ammoides majus, odore origani *B. J.* 49. where it is marked as an officinal plant. N. B. Ammi minus is the Ammi odore origani *J. B.* in *Herm. Cynof.* p. 268. The Ammi alterum semine apii *B. P.* is the Ammi semine odoratissimo & tenuissimo *J. B.* iii. 2, 25. in his *H. L.* p. 34. which is also *Boerb.* Ammoides, &c. and thus they differ in synonyma, if *Gesner's* and *Dale's* Ammi Verum be not the same.

A M O M U M.

S E C T. I.

Amomum vulgare, Sison quod amomum officinis nostris. *B. P.* 154. Sison, five officinarum Amomum. *J. B.* iii. 2, 107. *R. H.* 443. Petroselinum Macedonicum Fuchsi. *Dod.* 697. *Ger.* 1016. Sison. *Cæs.* 301. *M. U.* 12. Sison, σισων Dioscoridis. *H. Ox.* iii. 283. Sison vulgare, five Amomum Germanicum, *Park* 913. Sium aromaticum, Sison officinarum. *T.* 308. *R. Syn.* 211. Sison, foliis pinnatis. *H. Cliff.* 98. Bastard Stone-Parsley. The seed whereof is smaller than smallage seed, of a grayish brown colour, striated, of a subacrid aromatic taste, and fragrant smell.

It grows in moist and miry places, and on the banks of ditches in England. *R. Syn.* “It grows in ditches and banks, and moist places; flowering in summer; its seed being ripe in August.” *Miller's Bot.* 31. Though *Dioscorides's* description σισων agrees to it well enough, yet “semen est nobis incognitum,” says *Matthiolum*. p. 553. “Sison exiguum semen est quod in Syria nascitur apio simile, oblongum, nigrum, & ferventis gustus. Bibitur contra lienis vitia, & dysuriam, & commorantes menses. . . In cacumibus autem ceu granula multa gerit.” *Dioscor.* l. 3. c. 64. p. 200. so that this cannot be the Amomum. I find it not in Hippocrates nor Theophrastus; but in Galen.

S E C T.

S E C T. II.

It is a warm aromatic, carminative, and diuretic; and may be better substituted in place of Ammi verum than the Ammi vulgare, being but a bad succedaneum for the Amomum racemosum.

“Officinæ duplex semen sub Amomi nomine monstrant, quorum alterum majus nigrum, rotundumque est instar granorum piperis rotundi, vel cubearum, gustu minime acre, quod videtur veterum esse Sison, Sinon, &c. Alterum minutum semen & pallidum; utrumque raro in usum venit, locoque Amomi veterum recipitur Acorus.” *Schrod.* p. 531. “Diuretica & lithontriptica est.” *Dale* 124.

It is remarkably aromatic; and one of the lesser hot seeds, as they are called. “Ammeos, Amomi, daucique apiique minora.” *Marg.* “Gustu acriusculo aromatico.” *R. H.* “The seed is about the bigness of parsley seed, of a hot spicy smell and taste, something like a nutmeg.” *Miller’s Bot.* 31. “Amomi semen (est) Amomi racemosi *B. P.* vel Sinonis, quod Amomum officinis nostris.” *B. P.*

ANETHUM. *Vide* p. 83. *supra.*

ANGELICA. *Vide* p. 365. vol. I.

A N I S U M.

S E C T. I.

Anisum. *offic.* Anisum herbariis. *B. P.* 159. Anisum. *J. B.* iii. 2, 92. *Ger.* 1035. *Park.* 911. *R. H.* 450. Anisum vulgatius, minus, annuum. *H. Ox.* iii. 297. Anisum foliis radicalibus. *H. Cliff.* 107. Apium, Anisum dictum, semine suaveolente (majore & minore) *T.* 305. Common Anise.—The seed is small, roundish, striated, of a greenish colour, of a warm aromatic sweet taste, and pleasant smell.

It grows in Syria, Egypt, &c. and is cultivated in France, Spain, Malta, &c. “It is cultivated in Germany; but the best seed, which is a smaller sort, comes from Spain.” *Miller’s Bot.* 41. The Maltese and Alicant Anise is “most esteemed, though not so green as the French.” *Savary’s Dict.* i. 106. I have had ripe seeds often here; and from the same parcel of seed once four successive years: so well does it keep. *vid. Miller’s Dict.* vol. I. *Art. Apium.* It is not described by Dioscorides, l. 3. c. 65. p. 200. “Anisum vulgaris omnibus fere notitiæ planta est; feritur enim in campis, hortis, & viridariis.” *Matth.* 553.

S E C T. II.

It agrees with fœniculum dulce in virtues; is called pectoral and stomachic; and chiefly used for flatulencies, and as a corrector of purgatives.

"Calfacit, siccatur 3. recens mitius est, attenuat, discutit, diureticum est, lac urget, pulmonicum ac stomachicum imprimis audit. Hinc usus præcipui in inflatione ventriculi, tussi, &c. Infantibus ʒj. exhibitum, blande per inferiora ac superiora, saburram ventriculi intestinorumque ejicit. *Præpar.* 1. Confectio seminis. 2. Confectio laxativa simplex. 3. Conf. lax. compos. 4. Aqua destillat. ex herba & semine. 5. Aqua vitæ Anisata. 6. Oleum stillat. N. B. Anisum diu macerare oportet. Sic dat lbj. olei ʒß. 7. Sal. 8. Species Dianis." *Schrod.* 535.

"Anisi semen est acre, subamarum, ut prope ad urentium accedat caliditas. Vid. *Galen. Simpl.* l. 6. p. 43. C.

1. It is a sweet oily aromatic seed, neither hot nor bitter; but pleasant to both taste and smell: hence it is often put into bread. "Odore ac sapore gratissimo, dulci, cum jucunda quadam acrimonia." *R. H.* "Saporis dulcis & calidi; odoris dulcis & aromatici." *Nucl. Belg.* 23. "Saporis & odoris fragrantis." *Dale* 126. "The seeds are of a pleasant smell, and of an hot but very sweet taste." *Miller's Bot.* 41. — 2. It is commended outwardly (oleum præcipue) as anodyne in clysters, &c. inwardly for childrens gripes, given among their meat, or to their nurses, whose milk also it is said to increase. "Lactantis infantis lotium redolet Anisum, si nutrix oleum Anisi, ore tenuis sumpserit." *Helmont Butler*, p. 559. "Video itaque remedia anethi, carvi, anisi, cymini, dauci, &c. non a scholis, terminum causas ignorantibus, esse inventa; sed parvulis atque pauperculis, commiseratione divina, enotuisse a quibus scholæ, ut & reliqua plura experimenta, isthinc mendicarunt." *Id. de Flatibus*, p. 402. It was one of Pythagoras's favourite medicines, according to *Pliny*, l. 20. c. 17. p. 330. "Virulentorum animalium venenis adversatur, alvum & alba scæminarum profluvia sistit, lactis ubertatem præstat, Venerem stimulat, &c." *Dioscorid.* l. 3. c. 65. p. 200. — 3. "Analyti chymica, ex totius Anisi plantæ recentis lbv. dempta radice, prodierunt humorum lbij. ʒviij. gr. lx; olei ʒv. gr. xxxiv; carbonis ʒij. ʒviß, unde cinerum ʒix. gr. lx. & inde salis fixi alcali ʒviij. gr. xxvj. (ergo terræ ʒij. gr. xxxiv.) ac jactura fuit lbj. ʒv. ʒij. gr. xiv." *Geoff.* iii. 94. Here was very little earth, but an immense jactura. He says also that seminis lbj. yields by expression olei subviridis, odorati, palato grati, ac dulcis, a ʒvj. ad ʒix. & amplius, quod frigore facile concrevit. "Heurnius semini Anisi pulverato, & ad ʒj. cum pulte propinato infantes tam valide purgari asserit, quam ætate provectiores rhabarbaro. Infantium tormina & convulsivos motus sedat; unde ab Helmontio solamen intestinorum audit; & a quibusdam anima pulmonum dicitur." *Id.* iii. 96. It is one of the greater hot, or carminative seeds. "Fœniculum, carvi, cuminum, semen, Anisi." *Marg.*

S E C T. III.

It is given to ʒj. or ʒij. The essential oil ad gut. v. or vj. It is in the Mithridatium and Theriaca. The saccharum Anisatum is now out of use. "Pulvis a ʒj. ad ʒj. intus sumitur, oleum expressum & distillatum a gut. ij. ad x. vel xx. præscribuntur." *Geoff.* iii. 96.

APIUM.

APIUM. *Vide* p. 379. vol. I.

A Q U I L E G I A.

S E C T. I.

Aquilegia. offic. *Aquilegia sylvestris.* *B. P.* 144. *T.* 428. *II. Ox.* iii. 457. *Aquilegia flore simplici.* *J. B.* iii. 484. *R. H.* 706. *Syn.* 273. *A. cœrulea.* *Ger.* 1093. *A. vulgaris flore simplici.* *Park.* 1379. par. 271. *Isopyrum Diofcoridis.* *Col. Phyt.* p. 1. *Aquileia.* *Dcd.* 181. *Aquilegia.* *Cæs.* 589. *H. Cliff.* 215. *G. Pl.* 251. Common Columbine.—The seeds are small, somewhat oval, smooth, of a shining black colour, a disagreeable, sweetish, resinous taste, and not unpleasant smell.

It grows in some woods and thickets in England, flowering in June. “*Officin.* Semen, tum flores & herba.” *Schrod.* 537. “*Usu.* Herba, flores, semen.” *Dale* 180. “Herba, semen.” *Pharm. Lond.* 1721. “Folia, semen.” *Pharm. Edinb.* “The leaves and seed are used.” *Miller’s Bot.* 45. The seed itself is little used, and thrown out of the *London M. M.* “*Ufus* est feminis tantum. Diversitas tantum non infinita est in floribus. Semen etiam indistincte carpitur, modo ex hac modo ex illa.” *Hoffman.* p. 107. Columba a columba; *Aquilegia* ab aquila, a petalorum forma, fortè; vel *Aquilegia* ab aqua & lego, because the leaves retain water. “Nescio sane quid flori huic commune sit, vel cum aquila, vel cum columba.” *Hoffman,* 107. How the ancients called it, if known to them, is altogether uncertain. *Vid. B. P.* and *Hoffman,* l. c. for conjectures.

S E C T. II.

It is emollient and diuretic; called alexipharmic; and commended in the jaundice, gravel, scurvy, small-pox, measles, gripes, &c. “*Olus emolliens est.*”

“*Calfacit moderate, siccatur. aperit epas & lienem, ac imprimis meatum biliarium, unde regio medetur morbo: ciet urinam & menses, vulnera consolidat, ventris tormina sedat.*” *N. B.* Semen in expellendis morbillis ac variolis, usus mulierculis est creberrimi. Extrinsicus frequens ejus usus est ad putredinem gingivarum scorbuticam emendandam, ulceraque oris fauciumque solidanda. *Præpar.* 1. Aqua stillat. ex foliis floribus, & radice, Augusto collectis. 2. Conserva ex floribus, quæ rari usus est. 3. Acetum, ex infusione florum.” *Schrod.* p. 537. Semen stimulare aromaticum est in *Boerb. Lib. de M. M.*

The seed 1. is of a somewhat resinous, subviscid, sweetish, and disagreeable taste; and not unpleasant, and as it were balsamic, smell. “*Radix saporis, subdulcis est.*” *J. B. R. H.* “Semen saporis mucilaginosi, ingrati, cum obtusa acredine. Debilius est semine althææ.” *Herman.* MS. It is farinaceous and oily: and—2. commended in the jaundice by *Tragus* and *Matthioli*;

thiolus; in difficult labour by Clusius; in the small-pox and measles, to expel them, by Herman, &c. Vid. *R. H.* 707. "Camerarius docet decoctum herbæ totius, cum momento ambræ, contra ἀντιζυμιαν facere." *R. H.* "In usu folia, quæ semen virile spirant si conterantur." *Boecler. in Cynof. Herm.* p. 419. For the stone, they use the root in Spain. Tragus commends it for the colic. Etmuller for the scurvy. "Folia nostratibus in usu sunt in collutionibus & gargarisibus, contra affectus faucium & asperæ arteriæ calidos." *R. H.* Mr. *Geoffroy* gives no analysis; nor mentions the taste of either herb or seed; yet he says, "Semen multum olei & salis ammoniacalis continet." iii. 110. But I must own I am not satisfied as to its virtues. Is the herba an *olus molle*? — 3. Foliorum recentium thea is of a sweetish leguminous taste, not unlike that of asparagus; of a fine transparent greenish colour, with a cast of purple. *Syr. viol.* & *fol. heliotrop.* are not sensibly altered by it. *Aqua calcis*, or *ol. tartari*, gives it a beautiful emerald-green colour; as *sp. aceti* turns it to a fine ruby-red: after standing alone eight or ten days it stunk abominably. It appears from these experiments to be antacid, detergent, diuretic, &c.

A T R I P L E X.

S E C T. I.

1. *Atriplex offic.* *Atriplex hortensis alba* sive pallide-virens. *B. P.* 119. *T.* 505. *H. Ox.* ii. 607. *Atriplex alba* & *rubra hortensis.* *J. B.* ii. 970. *R. H.* 191. *A. sativa.* *Lob.* 127. *A. sativa alba.* *Ger.* 325. *A. sive olus aureum.* *Park.* par. 488. *Atriplex caule erecto annuo, foliis triangularibus.* *H. Cliff.* 469. White Garden Orrache or Arrach.—The seed is small, round, and blackish, difficultly parting with its seed-case, or two round valves, formed of the enlarged calyx. ("The seeds are of two sorts, one smaller by half than the other, blacker, and more shining." *Miller's Bot.* 65. Sometimes a small greyish seed of some chenopodium is kept for it.) They are of an insipid taste, and no smell.

2. *Atriplex foetida. offic.* *Atriplex olida.* *Pharm. Lond.* p. 5. *A. foetida.* *B. P.* 119. *J. B.* ii. 974. *H. Ox.* ii. 605. *Atriplex olida.* *Lob.* 128. *Ger.* 327. *R. H.* 198. *Garosmos.* *Dod.* 616. *Vulvaria.* *Tab. Ic.* 428. *Atriplex olida, sive sylvestris foetida.* *Park.* 749. *Blitum foetidum, vulvaria dictum.* *R. Syn.* 156. *Chenopodium foetidum.* *T.* 506. *Chenopodium foliis triangulari-ovatis,* *H. Cliff.* 84. Stinking Arrache.—"Habitat in Tartaria." *Lin. Sp. Pl.* p. 1053. "Atriplex hortensis nonnisi sata provenit, inquit *J. B.* Ast proculdubio alicubi terrarum spontis suæ est, quamvis locus ille nos hætenus lateat." *R. H.* 191. "Atriplex olida juxta parietes, & in locis ruderalibus provenit, sed rarius." *R. H.* 198. An indigena? The leaves and seed of the first, and herb of the second, are used. "*Officin.* Atriplicis folia, semen rarioris usus est." *Schrod.* 541. "*Usu.* Atriplicis folia, semina. *A. olidæ herba.*" *Dale* 74. "*A. sativæ herba; A. foetidæ herba, semen.*" *Pharm. Edinb.* "Atriplicis olidæ folia." *Pharm. Lond. M. M.* 5.

"Atriplex, ἀτρίπαλις, παρα το ἀθροῦς ἀνέγειν, cum octavo die a satu prodeat, Theoph. 7. hist. 1; χρυσόλαχανον, olus aureum, a luteo flore, quem
"fert

“ fert Dioſcorid. l. 2. c. 145. (p. 137.) cui & Plinio l. & c. 20. (p. 533.) “ genera duo, ſylveſtre & fativum.” *B. P.* 119. “ Atriplex aliis ab atro colore, quod comestum faciat homines lividos.” *R. H.* 191.

“ Atraphaxis, aliis chryſolachanon, cognitum olus eſt & duorum generum, ſylveſtre & fativum. Coctum id oleris inſtar eſtur, alvumque mollit: panos vero diſcutit ſive crudum, ſive coctum illinatur. Semen autem ex aqua mulſa potum ictero medetur.” *Dieſcor.* l. 2. c. 145. p. 137. “ Atriplex (ἀνράφαξις) humida eſt, neque tamen alvum dejicit.” *Hippoc. de viſus ratione*, l. 2. p. 359. lin. 43.

S E C T. II.

The ſeed of the garden Arrache is ſaid to be purgative and emetic. The leaves are diluent, emollient, and laxative; and uſed as a potheb; ſometimes alſo in cataplaſms and clyſters, though but ſeldom.

Stinking Arrache is emollient and deterſive; called uterine; and commended in female obſtructions, hyſteric diſeaſes, &c. in conſerve, ſyrup, infuſion like tea, or decoction, and tincture.

“ Atriplicis ſylveſtris & hortensis folia refrigerant 1. humectant 2. leniunt dolorem. Hortensis inſuper culinaris & alimentosa eſt; ſylveſtris autem in ſolvenda alvo celebris. *Uſus officinalis* præcipue externus eſt, in clyſteribus ac epithematibus paregoricis. v. g. antipodagricis, tum quoque in lotionibus pedum ſomni cauſa paratis.” *Schrod.* 541. Olus molle eſt in *Boerb. Lib. de M. M.* “ Atriplex olida uterina eſt, menſes provocat, fœtum mortuum ſecundinamque expellit, in hyſtericis multum prodeſt.” *Dale* 75.

The virtues of the Arrache depend on its diluent watry ſaline juice, perhaps rather ſaccharine than nitrous; and on its ſubviſcid nourishing ſubſtance: both which render it uſeful, when the blood is too thick, or the fibres too rigid and too elastic. The ſame may be ſaid of all the olera mollia; ſpinachia, beta, bonus Henricus, &c. As for the cathartic quality of the ſeed, we have Rhæſis’s and Matthiolus’s authorities for it, though its taſte diſcovers nothing of it. “ Scribit Serapio Raſim vidiffe hominem quendam, qui ex Atriplicis ſemine zij. pondere ſumpto, crebris tum vomitionibus, tum alvi dejectionibus vexatus fuit, adeo ut ad extremam virium imbecillitatem deveniret. Quod mihi quidem mirum non eſt, quandoquidem novi ego pharmacopolam quendam, qui ad ruſticos purgandos Atriplicis tantum ſemen exhibebat: quod iis non ſine moleſtia magna, alvum abunde ciebat, atque etiam ſimul crebros provocabat vomitus: quæ tamen facultas paucis, ut puto, hætenus innotuit.” *Matthiol.* p. 364. And by as few, I think, it is thus uſed at preſent; though Pliny takes notice both of the cathartic and emetic virtues of this ſeed. *Vid. l. & c. 20. p. 534.*

“ Analyſi chymica, ex foliorum Atriplicis albæ lbv. prodierunt humorum lbiv. ʒixß. gr. xxxviij; ſalis volatilis urinoſi gr. xiv; olei ʒvj; carbonis ʒiv, unde cinerum ʒij. ʒiij. gr. xxviij. ac inde ſalis fixi alcali ʒiß. gr. xvij. (ergo terræ ʒvij. gr. x.) & jaſtura fuit ʒj. ʒv. gr. iij.” ſecundum *Geoff.* iii. 142. More than ʒxxxviij. humoris which came firſt, ſali & alcali notas præbuerunt; and there was little acid in the remainder: and here much fixed ſalt, but little

oil. "Atriplex itaque sale essentiali donatur falso, ammoniacali, nitroso, qualis exurgeret ex mixtura spiritus nitri & salis volatilis urinosi, cum olei portione non mediocri conjunctis, multo phlegmate dilutis & pauca terra." *Ibid.* p. 143. An extravagant inference, without any foundation that I can discover!

Foliorum Atriplicis hortensis rubræ *B. P.* thea is of a claret-wine colour, and insipid herbaceous taste; and becomes of a brownish-black colour, when mixed with a solution of vitriol, precipitating a grayish-black sediment. *An subastringens est? Minime.*

Stinking Arrache is 1. of a disagreeable, herbaceous, and as it were detestive taste, and fetid fishy smell. "Odoris virosi intollerabilis, ut qui vel tactu levi manus ita inficit, ut longo tempore vix possit elui." *J. B. R. H.* "Fœtida hæc herbula est, corrupta putridaque salsamenta, ac fœtens horum jus gravissimo molestissimoque odore superat." *Dod.* 616. "It smelleth like old rotten fish, or something worse." *Park.* 749. "Folia odore viroso garum putridum referentia, præsertim si digitos inter conterantur." *Geoff.* iii. 144. — 2. Herbæ thea is of an herbaceous unpleasant taste, and a most disagreeable smell. A solution of vitriol does not blacken it, but precipitates a grayish sediment. It dilutes syrup of violets; and makes a solution of turnsole more purplish only. — 3. "Analyti chymica ex A. fœtidæ floridæ *lib.* prodierunt humoris primo limpidi, deinde flavescentis, odoris & saporis falsi lixiviosi, qui alcali urinosi notas præbuit *libij.* *zviij.*; humoris falsi, tum alcali urinosi, tum subacidi *libj.* *ziv.* *zviij.*; humoris empyreumatici sale volatile urinoso imprægnati *ziss.* *gr.* *xxiv.*; salis volatilis urinosi *ziss.* *gr.* *xij.*; olei *zj.* *zviij.* *gr.* *xxxij.* Carbonis fuerunt *ziv.* *zviij.*, unde cinerum *zj.* *zviij.* *gr.* *xlviij.* & inde salis fixi alcali *zj.* *zviij.* *gr.* *xxx.* (ergo terræ *zj.* *gr.* *xviij.*) ac jactura fuit *zxxj.* *gr.* *xxxix.*" "Tota planta odorem fœtidum ammoniacalem urinosum refert, & constat sale essentiali ammoniacali, fere explicito, & oleo crasso copioso permixto." *Geoff.* iii. 145. Hence it is more alkaline than the former; and may be said to contain a sal volatile fœtidum, or spiritus volatilis fœtidus, rather than a sal ammoniacus explicitus: so that it is an attenuating saponaceous substance. But its fœtor seems first to have recommended it; and that not very long ago; but more in Britain than elsewhere. I have not observed it often in foreign pharmacopœias. The Parisian indeed has it: and it is retained in the London disp. where it was first received in the year 1721.

"Bonus hic henricus inquit Tragus, vermes in ulceribus putridis animalium quadrupedum natos excutit, certissimo experimento, si herba tusa ulceribus imponatur; id quod non semel ipse vidi. Sunt qui vermes ejici dicunt, si herba solum adalligetur jumento," *J. B.* ii. 975. "Nullus usus est herbæ, ex uero tamen laborantibus, gravitate odoris prodesse potest: nam, uti Hippocrates ait, cum uterus strangularit, ad nares graveolentia adhibenda." *Dod.* 616. Would not stinking rotten fish then do as well? "Folia contusa cum saccharo conservam efficiunt hystericiis utilissimam (*D.* Needham) herba arefacta, & in aqua cocta, instar theæ, mire passioni hystericiæ prodest (*D.* Palmer)" *R. H.* 198. "The tincture of this plant, drawn with brandy, is good for the vapours." *T. Hist. pl.* 17. "In paroxymlis hystericiis, ejus decoctum pro clystere utile censetur." *Geoff.* iii. 145. It is in none of the compositions *Pharm. Lond.*

B O M B A X.

S E C T. I.

Bombax, Gossipium, Xylon. *offic.* Gossipium frutescens, semine albo. *B. P.* 430. Gossipium, five Xylon. *Dod.* 66. *Ger.* 901. *G.* frutescens annuum. *Park.* 1553. *G.* herbaceum semine albo. *H. Ox.* iii. 517. *G.* Brasilianum, flore flavo *Par. B. prod.* 337. *Cat. Jam.* 156. Xylon, five Gossipium herbaceum. *J. B.* i. 343. *T.* 101. *R. H.* 1164. Gossipium caule decumbente. *H. Cliff.* 350. The Cotton Plant or Bush.—The seed is about the bigness of a pea, somewhat oval, containing in a dark brown (though sometimes green, white, or black) coloured husk a white kernel, tasting like sweet almonds. “Est bonum quamdiu medulla virescit.” *Hoffman* 251.

Cotton grows in both the Indies. There are several species of it: in *B. P.* there are three besides the above-named. *Ligou's* best American Cotton has a green seed. I have often raised and sometimes had it nearly ripe, so that the seed grew. It is cultivated and grows freely in several places of Europe, as Italy, Sicily, Cyprus, Candy, &c. There are fields of it between Jerusalem and Damascus: and it is incredible how much Cotton Malta yearly exports. “The island Malta, which is about sixty miles in circumference, sells yearly of cumin seed 348000lb weight; of anise seed 116000lb. each at seven, eight, or nine crowns the cantare, *i. e.* 116lb; and of Cotton-wool, in the husk, 14000 cantares, *i. e.* 1624000lb weight.” *Vid. Mr. Ray's Travels in Harris's Coll.* ii. p. 571.

“Ut Græce ξυλον & γοσσιπιον, ita Latinis Xylon & Gossipium nominatur. At Theoph. 4. hist. 9. δενδρον εριοφορον, dicitur. In Tylo, inquit, insula multæ sunt arbores lanigeræ, quæ folia vitis habent, verum minora, fructum fert in quo lana continetur mali magnitudine, vere nascitur occlusum, quod cum maturum est aperitur, & lana excipitur, qua telas texunt. . . . Plinius, l. 19. c. 1. (sub finem) inter lini genera recensuit, his verbis: fruticem quem aliqui Gossipion vocant, plures Xylon, & ideo lina inde facta Xylina: parvus est, similemque barbatae nucis defert fructum, cujus ex interiore Bombyce lanugo netur: nec lina sunt eis candore mollitie præferenda.” *B. P.* 430. “Est Coto & Bombax Serapioni: Bombax officinarum.” *Ibid.* It ought to be Bombyx, not Bombax. . . . The first Greek writer I find the seed in, as a medicine, is Myrepsus, who, *Antidot.* sect. 1. c. 425. p. 447. in an antidotus cardiaca, has, among a vast number of ingredients, carnis seminis Gossipii (βαμπανις) about ʒβ. He, probably, had it from the Arabians. *Vid. Bod. in Theoph.* p. 425. Geoffroy does not mention it.

S E C T. II.

The skin of the seed is mucilaginous and antacid; agreeing with althæa, as the kernel does with sweet almonds, in virtues, being reckoned pectoral and restorative. But it is never used here now-a-days.

U u 2

“*Officin.*”

“*Officin.* Semen & lanugo, Gossipium officinarum (dicitur Cottus seu Cotta & Bombax Serapioni.) *Vires.* Lanugo calfacit & siccatur: semen pulmonarium est, tussientibus & asthmaticis maxime proficuum, auget semen. N. *Ufus* tum seminis, tum lanuginis rarus est modernis.” *Schrod.* p. 548.

The kernel is oily and farinaceous; and the plant in character comes near the malva or althæa. The Egyptians use much the mucilage of the seeds in ardent fevers, coughs, and for corrosive poisons; and the lanugo, as we do lint for wounds and ulcers. Is it not too elastic for this purpose? Vid. *R. H.* “Serapio dicit semen calidum & humidum esse. Id ipsum monstrat sapor ille suavis, nucleis pineis, aut amygdalis non absimilis.” *Hoffman,* p. 251. The expressed oil is reckoned cosmetic.

B R A S S I C Æ.

S E C T. I.

1. Brassica, Caulis, *offic.* Brassica capitata alba. *B. P.* iii. *T.* 119. *J. B.* ii. 826. *H. Ox.* ii. 206. *Ger.* 312. *R. H.* 794. Brassica capitata albida. *Dod.* 623. B. capitata vulgaris. *Park.* par. 503. Brassica, radice caulescente, tereti, carnosa. *H. Cliff.* 338. Common White Cabbage, or Colewort.—It is one of the many varieties, which culture, assisted by different climates, has produced, from (probably) the seed of the Brassica maritima arborea, seu procerior, ramosa, *H. Ox.* ii. 208. *T.* 220. *R. Syn.* 293. Brassica arborea, seu procerior ramosa maritima, Morisoni. *R. H.* 796. Brassica maritima Petiv. *H. B.* 45, 6. An B. rubra vulgaris *J. B.* ii. 831? Sea Colewort, or Cabbage; “which grows on Dover cliffs, and divers other the like places in England.” *R. Syn.* The seed of any of them may be used indifferently.

2. Napus, Napus sylvestris, Bunias. *off.* Napus sylvestris. *B. P.* 95. *T.* 229. *J. B.* ii. 843. *H. Ox.* ii. 214. *R. H.* 802. *Syn.* 295. Bunias, sylvestris Napus, *Lob. Adv.* 67. Bunias sylvestris Lobelio. *Ger.* 235. Bunias, sive Napus sylvestris. *Park.* 865. Brassica radice caulescente, fusiformi. *H. Cliff.* 339. Rape or wild Navew.—“Inter segetes & in aggeribus fossarum sponte & quidem frequens oritur apud nos in Anglia.” *R. H.* It is a controversy whether the seed of this or of the Napus sativa *B. P.* 95, Navew-gentle, or sweet Navew, is to be preferred, for the theriaca; though it is a thing of no moment. Vid. *Dale* 202. Any Cole or Turnep seed may supply its place. “Napus, βουνίας” *Dioscoridi*, l. 2. c. 136. Significatione a tumente figura deducta, quare “rapis hoc nomen magis competere, sunt qui velint: γεργυλης species Galeno. “Differentias duas & in medicina Græcos servare Plinius, l. 20. c. 4. scribit, “alterum Bunion, alterum Buniada vocantes: sunt qui Buniaden Napum sylvestrem esse velint. At l. 19. c. 5. Naporum genera quinque facit, ubi “legendum est Raphanorum, cum ex Theoph. 7. hist. 4. desumpta sint, ubi “των ραφανιδων genera quatuor dicit.” *B. P.* 95. Dioscorides does not describe it. The N. sativa, however, is but a variety of the sylvestris, which is a species Brassicæ *Linnaeo*.

N. B. “Brassicæ laudes longum est exequi, cum & Chrysippus medicus “privatim volumen ei dicaverit, per singula membra hominis digestum, &

“ Dieuches : ante omnes autem Pythagoras & Cato non parcius celebrarint.
 “ Cujus sententiam vel eo diligentius persequi par est, ut noscatur, qua medi-
 “ cina usus sit annis sexcentis Romanus populus.” *Plin.* l. 20. c. 9. It is
 $\chi\epsilon\alpha\upsilon\epsilon\eta$ in *Dioscor.* l. 2. c. 146. p. 137. who gives no description of it. But
 several marks of it are found in *Theophrastus*, who calls it also $\rho\alpha\pi\alpha\upsilon\sigma$. Vid.
Bod. in Theoph.

S E C T. II.

These are antacid, attenuant, and diuretic; called anthelmintic and alexi-
 pharmic; and commended internally for the scurvy, worms, malignant dis-
 eases, &c. and externally (folia) as detergent vulneraries. Used by way of diet
 they are nourishing, laxative, and alcalicent.

“ *Officin.* Folia, jus foliorum, semen. Folia calfaciunt & siccant citra acri-
 “ moniam; vulneraria sunt, ebrietatem arcent, astringunt & laxant, adeoque
 “ qualitatis mixtæ; nimirum ut aiunt Salernitani, *jus caulis solvit, cujus sub-*
 “ *stantia stringit.* Extrinsecus, usitatum est rusticis vulneribus folia imponere,
 “ ut consolidentur, quinimo & pleuriticis doloribus imposita, eos mitigant.
 “ Semen eadem pollet qualitate cum foliis. *Præpar.* Loch de caule.” *Schrod.*
 “ Semen laxat, lumbricos necat, ebrietatem arcent.” *Marg. M. M.* Antiscor-
 buticum lenius est in *Boerb. Lib. de M. M.* “ Brassicæ semen potum lumbrici-
 “ cos expellit, ac in antidota quoque theriaca ($\epsilon\iota\varsigma\ \alpha\upsilon\tau\iota\delta\omicron\tau\omicron\upsilon\varsigma\ \epsilon\pi\iota\pi\iota\alpha\varsigma$) addi-
 “ tur.” *Dioscor.* l. c. “ Napi sativæ semen calfacit, siccant, abstergit, aperit,
 “ digerit, attenuat, & incidit, venenis potenter resistit (unde & theriacam
 “ Androm. ingreditur) morbillos ac variolas, peculiari facultate, a centro ad
 “ circumferentiam corporis pellit; ideoque in febribus malignis & petechiali-
 “ bus crebri usus est (in emulsionibus). Confert & in ictero, urina remorata,
 “ &c. Dosis ʒj. *Præpar.* Oleum expressum.” *Schrod.* 632.

1. The seeds are of an oily, hot, and bitterish taste, and no smell. The
 leaves taste somewhat sweet, but more so when boiled; and, whether raw or
 decocted, soon putrify and become very foetid and acrid; as the decoction also
 does.—As the different kinds agree in appearance, character, taste, and smell,
 I give them the same virtues; in which they differ little from erysimum; only
 being more agreeable, and fleshy; on which account they are more used in
 food. — 2. According to Galen the broth or decoction by itself, or the not
 too much boiled cabbage with the broth, is laxative: but the substance with-
 out the broth, especially if boiled in two or three different waters, is binding
 or astringent: which opinion has been generally adopted since. Hence,

“ Jus caulis solvit, cujus substantia stringit,

“ Utraque quando datur, venter laxare paratur.” *Schola Salern.*

Yet I cannot help thinking the substance more laxative; and the decoction
 more diuretic. “ Brassica acrimoniam quandam habet, qua secessum movet;
 “ & simul boni succi est. *Hippoc. de Affect.* p. 529. “ Brassica ($\chi\epsilon\alpha\upsilon\epsilon\eta$) cale-
 “ facit, per alvum secedit, & biliosa educit.” *Idem de Viæ. rat.* l. 2. p. 359.
 —3. The analysis of the Cabbage and Collyflower, as Mr. Geoffroy gives
 them, differ more than the substances themselves, which cannot be called dif-
 ferent species, both easily degenerating into open Coleworts. Vid. *Hist. Ox.*

“ Brassica,

“ Brassica omnibus oleribus antestat. Eam esto vel coctam vel crudam.
 “ Crudam si edas, in acetum intingito, mirifice concoquit, alvum bonam fa-
 “ cit, lotiumque promovet, ac ad omnes res salubris est. Si voles in con-
 “ vivio multum bibere, cœnareque libenter, ante cœnam esto crudam, quan-
 “ tum voles ex aceto. Et itein ubi cœnaveris comesto alia quinque folia,
 “ reddent te quasi nihil comederis, biberisque, bibesque quantum voles.”
 (Here follow directions how to prepare it, so that it may prove cathartic; and
 also how to make it diuretic). “ Ad omnes tumores, ad omnia vulnera eam
 “ contritam imponito. Hæc omnia ulcera purgabit, sanaque faciet sine dolore;
 “ tumida concoquet; vulnera putrida, cancrasque purgabit, sanasque faciet,
 “ quod medicamentum aliud facere non potest.” (He then commends it for
 fistulas, luxations, contusions, arthritic diseases, troublesome dreaming, colics,
 &c. makes the urine of such as eat it a fine medicine: and adds,) “ Quo li-
 “ bentius edas aceto mulso spargito, mentham addens siccam, & rutam, &
 “ coriandrum, sale sparsam paulo libentius edes. Id bene faciet, & mali nihil
 “ finet in corpore consistere, & alvum bonam faciet. Si quid antea mali intus
 “ erit omnia sana faciet. De capite & de oculis omnia deducet, & sanum fa-
 “ ciet. Hanc mane esse oportet jejunum. Et si bilis atra est, & si lienes
 “ turgent, & si cor dolet, & si jecur, aut pulmones, aut præcordia, uno
 “ verbo omnia sana faciet, quæ intro dolitabant, &c. &c. Hæc inter alia
 “ Cato.” *J. B. ii. 824.*

1. *Analysi chymica Brassicæ capitatæ foliorum* lbv. præbuerunt humorum lbiv.
 “ 3xj. 3j. gr. xxxiv. (of which all except about 3xij. was saporis obscure acidi,
 “ manifeste acidi, or intense acidi;) salis vol. urinosi gr. xx; olei 3ij. gr. xxij.
 “ Carbo pendebat 3ij. gr. vj, unde cinerum 3v. gr. xl. ac inde salis fixi mere
 “ alcali, 3ij. gr. lxvi. (ergo terræ 3ij. gr. xlvi.) jactura fuit 3x. gr. lxij. (sum.
 “ lbv.) Per hanc analysim liquet Br. capitatam sale essentiali donari tartareo,
 “ nitroso, ammoniacali, cum olei portione mediocri conjuncto. 2. *Ex Bras-*
 “ *sicæ cauliflore summitatum recentium* lbv. prodierunt humorum lbiv. 3viiij.
 “ 3vj. gr. xlv. (all saporis obscure alcali, or alcali urinosi, except the first
 “ 3xiv. 3iiij. which were obscure acidæ; as the last 3v. fere, were sale vola-
 “ tili urinoso copioso impregnatæ); salis vol. urinosi 3ij; olei 3xj. gr. vi.
 “ Carbo pendebat 3ij. 3viij, unde cinerum 3vj. gr. xxiv. ac inde salis fixi
 “ mere alcali 3iv. gr. lxvj. (ergo terræ 3j. gr. xxx) & jactura fuit 3iiij.
 “ gr. lxiv. (sum lbv. gr. vj.) Ex hac analysi concludendum sale essentia-
 “ lem B. caulifloræ esse ammoniacalem.” *Geoff. iii. 216.* But both the ana-
 lyses & conclusions here appear to be faulty. He describes six kinds of Bras-
 sicæ; and is long enough on their virtues (employing seven pages on this ar-
 ticle) which are taken almost intirely from *R. H.* without naming him once.
 See *R. H.* for its use in warts, wounds, ulcers, scurvy, pains, &c.

L E C T U R E LXIX.

C A N N A B I S.

S E C T. I.

Cannabis. *offic.* Cannabis sativa. *B. P.* 320. *T.* 533. *R. H.* 158. *H. Ox.* iii. 433. *R. Syn.* 138. *Park.* 597. Cannabis foecunda. *Dod.* 535. Cannabis mas. *J. B.* iii. 447. *Ger.* 708. Cannabis fructum ferens, non florens, *Cæs.* 157. “Ba. & Ma. *Kæmpf. Jap.* 897. Cannabis foliis digitatis, foemina.” *H. Cliff.* 457. Winter Hemp.—This has a smooth, shining roundish seed, containing, under a thin grayish shell, a white kernel, of an oily sweetish taste, and somewhat heavy smell, if recent and bruised.

It is said to grow in the East-Indies, Malabar, Japan, &c. “Præterito anno inter semina Japonica, & Cannabis fuit enata in magnitudinem duplo humanam, & arborefcens quasi, tamen annua, ne unica nota a nostra diversa.” *H. Cliff.* 457. I find it not in Hippocrates, nor Theophrastus, though it is mentioned by Herodotus, l. 4. “Cannabis sativa, planta ad texendos funes validissimos (ἐν χερσίν ἐν τῷ βίῳ) mortalium generi perutilis, folia gerit fraxini, sed foedi odoris, caules proceros, inanes, semen rotundum; quod cibo largiore genituram extinguit. Ex eo recente expressus succus convenienter aurium doloribus instillatur.” *Dioscor.* l. 3. c. 165. p. 240. Pro etymol. vid. *Bod. in Theoph.* p. 945. “Qui inebriantium gaudent varietate, vel opii sapore non admodum capiuntur, illi a Cannabe ecstasin petunt temulentiae. An hæc vera sit Cannabis nostras, an ejus quædam species Bangue dicta, (*H. Mal.* x. p. 119. descripta) hic non disquisivero. Mihi ut ovum ovo, in omnibus nostrati similis apparuit, cum mas, tum foemina: adeoque crederem cælo soloque acceptam debere virtutem suam.” *Kæmpf. Amæn.* p. 645. “Bangue a Cannabe plantam specie distinctam esse ab eruditissimo viro, & rei herbariæ peritissimo D. Hans Sloane certior factus sum.” *R. H.* 159. But *Kæmpfer's Amœnit.* are twenty-six years later than *R. H.* “Locum natalem nondum novimus, verum in omnibus fere regionibus in agris feritur.” *R. H.* Vid. *H. L. Bat.* p. 25.

S E C T. II.

It is antacid and anodyne; called antaphroditic; and commended for coughs, heat of urine, gonorrhœa, &c. The leaves are narcotic.

“*Officin.* Semen, raro herba. Semen calfacit (*aliis refrigerat*) siccaturque, semen genitale immittit (usu continuato) tussi opitulatur, ictero subvenit: at caput vaporibus replet. Herba refrigerat & siccatur, ambustis convenit, aurium dolores (ab obstructione natos) sanat succus instillatur.” *Schrod.* 553. Hæc planta opii incommoda inducit, etiam solo odore: ejus feminibus utimur tanquam leniter narcoticis, & valent ad morbos pectoris, ad tussim,
“ ad.

“ ad affectus viarum urinarum, ad gonorrhœam, et ad ardores Veneris.”
Nucl. Belg. p. 58.

1. The seed is very oily; the green herb has a strong heavy smell. “ Folia odore caput tentante.” *J. B. R. H.* “ Semina sunt valde oleosa, temperata, saporis dulcis & fatui.” *Nucl. Belg.* 58. “ Medulla seminis dulcis oleosa; odoris, dum recens est, gravis, caput ferientis.” *Geoff.* iii. 248 —
 2. The water in which Hemp is steeped is said to be poison for every animal. “ Hinc legibus Angliæ, sub gravi multa, cautum est, ne Cannabis aut Linum in flumine aliquo aut aqua corrente, neve in fonte, stagno, aliove conceptaculo aquarum publico aut communi, ubi pecudum greges & armenta solent adaquari, macerentur.” *R. H.* 159. Its juice, externally used, as for pains in the ears, &c. gives ease. Hence it appears to be narcotic — 3. Although hens, singing birds, &c. seem much to delight in Hemp-seed, yet, if fed with it alone, they soon grow dull, swell, and die, of impostumations in their guts, as a noted bird-fancier told me. See Matthioli's, Lobel's, and Ray's opinions relative to this in *R. H.* 158. “ Semen Cannabis, says Galen (*Alim. Facult.* l. i. c. 34. p. 15. F.) concoctu est difficile, stomachoque ac capiti nocet, pravique est succi. Sunt tamen qui eo friso, cum aliis tragematibus vescantur.” “ In Francia orientali, referente Trago, aliisque nonnullis regionibus, semen Cannabis, quotidie inter cæteros cibos decoquitur, non aliter quam hordeum: at caput vaporibus replet, & immodice si estur delirium facit, ut coriandrum.” *R. H.* 158. It is said by *Dioscorides*, &c. “ largiore cibo semen extinguere.” Which may be true of the banque and of opium also, however much this is used in the east. *Vid. R. H.* 158. The famous Queen Elizabeth is said “ contractas variolarum suppuratione maculas in se ipsa delevisse, emulsione lactea, ex semine Canabino, separatis corticibus, cum aqua rosarum parata, & cum gossipio admota.” *R. H.* Ibidem. This seed is commended in the jaundice, in which, I think, it would rather be hurtful, being a glutinosum pingue.

S E C T. III.

It may be given in emulsion to ℥j. The oleum expressum is reckoned good for burnings; but little use is made of this seed here.

“ Analyfi chymica ex Cannabis foliorum & summitatum recentium lbv. prodierunt humorum lbij. ℥xj. ʒvj. gr. lx; olei ℥ij. ʒj: carbonis fuere ℥xj. ʒij, unde cinerum ℥iv. ʒvj, ac inde salis fixi alcali ʒiv. gr. xlv. (ergo terræ ℥iv. ʒj. gr. xxvij.) & jactura fuit ℥vß. gr. xii.) Hæc planta sale essentiali ammoniacali videtur instructa, cum multo oleo crasso & narcotico conjuncto.” *Geoff.* iii. 248. Cætera fere omnia ex *R. H.* innominata.

C A R D A M O M A.

S E C T. I.

1. Cardamomum, Cardamomum minus. *offic.* Cardamomum simpliciter in officinis dictum. *B. P.* 414. Cardamomum cum siliquis, seu thecis brevibus. *J. B.* ii. 205. Cardamomum minus vulgare. *Ger.* 1547. *Park.* 1576. Cardamomum minus *Bontii* 127. *R. H.* 1204. Elettari, 2. *H. Mal.* xi. 9. The (small, or) common Cardamoms.—These are small, brown, angular grains, of a very hot spicy taste, and aromatic smell; contained in little triangular and tricapular pods, of a whitish or pale colour.

They are brought from Malabar, and other places of the East-Indies. “It grows in the territories of Visapour.” *Tavern. Harris*, col. 2. 373. The “small Cardamoms are found only on a mountain in the kingdom of Cananor.” *Savary’s Diar.* i. 548.

2. Cardamomum majus. *off.* Cardamomum majus officinarum. *B. P.* 413. *H. Ox.* iii. 254. Cardamomum cum siliquis seu thecis longis. *J. B.* ii. 205. Cardamomum majus vulgare. *Clus. Exot.* 187. *Ger.* 1542. *Park.* 1576. Cardamomum majus. *Bontii* 127. *R. H.* 1204. The Great Cardamoms.—The seeds are small, cornered, reddish brown grains, of a hot aromatic taste, and spicy smell; contained in long (roundish) tricapular, and somewhat triangular pods, of an ash colour.

This is now a stranger to the shops. “Ex Java ad nos deferuntur, sed rarius in nostris officinis inveniuntur: alii enim grana paradisi officinis dicta, seu meleguetam, non sine errore; alii amomum verum. *Ger.* horum loco substituunt.” *Dale* 252. “They grow in the island of Java, and from thence were brought to us; but we have had none come over for many years, being now grown quite out of use, and not to be met with in the shops.” *Miller’s Bot.* 112. “Hæc cardamomi species raro ad nos venit.” *Geoff.* ii. 367. In Holland they commonly shew the amomum racemosum for it.

3. Cardamomum maximum, grana paradisi, *offic.* Grana paradisi officinarum. *B. P.* 413. Cardamomi genus maximum, grana paradisi sive melegeta. *J. B.* ii. 204. Grana paradisi, *Ger.* 1542. Melligette, sive Cardamomum maximum, & grana paradisi. *Park.* 1576. Melegeta (seu) grana paradisi officinis dicta. *R. H.* 1205. Grains of paradise—are small, cornered, reddish-brown seed, like the Cardamoms, but of a much more hot and spicy taste, and not so aromatic.

“Ex Guinea ad nos transportantur.” *Dale* 253. They are said to grow in pods, of the size and figure of figs. “Semina melegettas appellavere quidam, quod milium Indicum referant, Italis melegam appellatum inquit Matthiolum. . . Nascitur in Africa, insula Madagascar, & Indiis Orientalibus, unde a Batavis advehitur.” *Geoff.* ii. 366. But the seeds only are brought to us.

4. Amomum, Amomum verum. *offic.* Amomum racemosum. *B. P.* 413. Amomum novum Cardamomi vulgaris facie, sive Indicus racemus, *J. B.* ii. 195. Amomum verum. *Ger.* 1548. *R. H.* 1697. Amomum genuinum. *Parkin.*

kin. 1567. Elettari, i. *H. Mal.* xi. 9. The true Amomum:—which bears small, cornered, blackish, wrinkled grains, like the lesser Cardamoms, of a hot aromatic taste, and fragrant smell; contained in roundish, tricapular pods, of a whitish colour.

It is brought from the East-Indies; but if it deserves the name Amomi *veri*, or not, may well be doubted. These four seeds, whether they belong to different species of the same genus of plants, or not, are commonly joined together. But whether any of them are the Amomum, or Cardamomum of the ancients, with a variety of other questions or controversies concerning them, is an enquiry more curious and difficult, than useful and instructive for you. You may consult *J. B.* ii. p. 191. ad p. 208. *Bod. in Theoph.* p. 1012. ad p. 1017. and *Nicolaus Maroneas* (or *Marogna*, a physician of Verona) his *Commentarius de Amomo*, Basilæ 1608. in 8vo. Linden. p. 838. and *Commentarius in tractatus Dioscoridis & Plinii de Amomo*: Basilæ 1608. in 4to. *Se-guier. B. B.* p. 277.

“ Dicitur ἀμωμον, ab odore bono, qui reprehendi minime queat. Hinc vi-
 “ dentur Græci omne aroma, quod sincerum & inculpatum esset ἀμωμον vo-
 “ casse: sic ἀμωμον λιθανιον: thus sincerum: Arabes Hamama, Turcæ Ama-
 “ ma vocant. Pretiosissimis unguentis addebatur; ut Plinius, l. 13. c. 1. &
 “ 2. & Dioscorides, l. 1. c. 14. Poetæ pro quolibet unguento ponebant Amo-
 “ mum. Sic

“ Et matutino sudans Crispinus Amomo,

“ Quantum vix redolent duo funera. *Juven. Sat.* 4. v. 108. 9.

“ Crassoque lutatus Amomo. *Persius, Sat.* 3. v. 104.

“ Inde Amomiam (momiam & mumiam, vulgo) recentiores vocaverunt,
 “ omne illud quo corpora mortuorum ungebantur & condiebantur.” Vid.
Bod. in Theoph. 1014.

S E C T. II.

They all are stimulating aromatics, attenuant, diaphoretic, and carminative; called cephalic, stomachic, uterine; and commended for the palsy, vertigo, weak and windy stomachs, female obstructions, fluor albus, &c. The grains of paradise are almost as hot as pepper: the lesser Cardamoms are milder, but preferred to the other two, *viz.* Cardam. majus & Amomum.

“ *Officin.* Fructus uterque Cardamomum minus, scil. & Grana paradisi. *Vi-*
 “ *res.* Utrumque calfacit & ficit, (majus gr. 2. minus gr. 3.) partes prin-
 “ cipes recreat, attenuat, status discutit, coctionem juvat; proin conducibilis
 “ eorum usus est in affectibus capitis, ventriculi, & imprimis uteri. *Præp.* 1.
 “ Oleum Cardamomi. 2. Confectio.” *Schrod.* p. 555. “ Loco Amomi
 “ veterum recipitur acorus.” *Idem.* p. 531.

They are remarkably aromatic, scarcely acrid, but generally agreeable.
 “ Cardamomi (1 & 2.) sapor fervidus.” *J. B.* “ Eorum semina aromatica.”
Dale. “ Cardam. minoris semina saporis acris, calidi, camphorati, odoris aro-
 “ matici. *Nucl. Belg.* p. 61. “ Cardamomum minus saporis acris, aromatici,
 “ ejusdem odoris; majori præstantius est. Majus saporis & odoris minori
 “ fragran-

“fragrantioris: non est in usu, nam non fert ætatem ut minus.” *Herman. Cy-nos.* 260. “Cardamomum minus sapore acri, amaricante, aromatico, & quasi camphorato.” *Geoff.* ii. 368. “Cardamomum medium Matth. majus Bon-tii, sapore acri, aromatico.” *Ibid.* 376. Grana paradisi “sunt gustu fer-vida, ut piper & zingiber, quibus odore etiam non dissimilia.” *J. B.* “Sa-pore acri & fervido inter Cardamomum & piper.” *Dale* 253. “Saporis acris piperini.” *Nucl. Belg.* 61. “Semen gustu acre, fervidum & urens, ut piper & zingiber, quibus odore etiam non dissimile est. Magna copia huc affertur, & piperis vices implet in ciborum condimentis.” *Geoff.* ii. 367. “Amomum, ejusdem saporis cum Cardamomis.” *J. B.* ii. 195. “Semina aromatica.” *Dale.* “Saporis & odoris camphorati, calidi & mordicantis.” *Nucl. Belg.* p. 18. “Racemo odor inest fragrans, lavandulam quodammodo æmulans, sapore acri: in feminibus vero a folliculo exemptis, major odoris acrimonia, ut & saporis vehementia, quæ camphoram quodammodo sapit.” *Geoff.* ii. 374. They are much used by the Indians in food, as an agreeable spice; as well as in medicine, to help digestion, expel wind, &c. *Vid. R. H.* The Cardamomum majus and Grana paradisi are thrown out of the *London M. M.* but Cardamomum minus is in no less than fifteen or sixteen of the pre-scriptions of that new dispensatory: and so accurate has the committee been as always to order the semina decorticata. “Oleo essentiali aromatico pollut Cardamomi species, quod, aqua maceratæ, & postea distillatæ, copiosum præbent.” *Geoff.* ii. 371. He says the same of the Amomum, p. 374. The tincture and distilled spirit are considerably more grateful than the in-fusion or distilled water: the watry infusion appears turbid and mucilagi-nous, the tincture made in spirit limpid and transparent.” *New Dispensatory*, p. 107.

S E C T. III.

The Grana paradisi may be given in substance to ℥j: Cardamomum minus to ʒß: the other two to ℥ij. in substance: and to double these quantities in in-fusion. Cardamomum minus is an ingredient in the aqua absinthii composita, aqua mirabilis, tinctura rhæi dulcis, tinctura sacra, tinctura salutaris, pulvis diaromaton, pulvis hieræ picræ, mithridatium, and theriaca: and the amo-mum is in the theriaca, and magma hedychoi also.

“Cardamomi dosis in substantia a ℥ß. ad ℥j. infusum vero ad ʒß.” *Geoff.* ii. 371.

CARDUUS. *Vide* p. 99.

C A R D U U S M A R I Æ.

S E C T. I.

Carduus Mariæ. *offic.* Carduus albis maculis notatus vulgaris. *B. P.* 381. *T.* 440. *H. Ox.* iii. 155. Carduus leucographus. *Dod.* 722. Carduus maria-nus, sive lacteis maculis notatus. *J. B.* iii. 52. Carduus Mariæ. *Ger.* 1149. *R. H.* 312. *Syn.* 195. Carduus Mariæ vulgaris. *Park.* 975. Carduus squa-

mis calycinis margine & apice spinosis. *H. Cliff.* 393. Common Milk-Thistle, or Ladies-Thistle.—The seed is oblong, flattish and smooth, of different colours, containing an oily farinaceous and somewhat bitter white medulla.

It grows on banks, and borders of fields, &c. flowering in June the second year. “Our lady’s thistle is called of the Arabians bedoard, or bedeguar, as “*Matth. Sylvaticus testifieth.*” *Ger.* 1150. “*Officin. Semen imprimis, tunc folia, & nonnunquam radix.*” *Schrod.* 556. “*Usu. Folia.*” *Dale* 105. “The leaves and seed are used.” *Miller’s Bot.* 115.

“*Carduus lacteus, σιλυέον* Dioscoridi, l. 4. c. 159. Spina est lata, foliis “*chamæleonti albo similis.*” *Plinio* l. & c. 22. *Silybum chamæleonti albo* “*simile æque spinosum.*” *B. P. Dioscorides*, l. c. p. 304. adds, “*quæ adhuc* “*novella, cum oleo & sale cocta, estur.*” Stillans e radice liquor drachmæ pon- “*dere potus ex aqua malsa, vomitiones ciet.*” Do these effects agree with those of our C. M.?

S E C T. II.

This seed is antacid, somewhat nutritive, and (in emulsion, or decoction) diluent; called pectoral; and commended in the pleurisy, rheumatism, &c. But it is never used with us.

“*Pectoralis imprimis Carduus Mariæ censetur.* Calfacit & siccit 2. sub- “*astringit, incidit, aperit: in cæteris æmulatur Carduum benedictum.* Usus “*præcipue in pleuritide, ictero ac hydropæ.* Dosis seminis ad ʒj. N. Semen “*in emulsionibus crebri est usus.* *Præp. aqua, ex herba tenella.*” *Schrod.* 556. “*Antacida.*” *Boerb. Lib. de M. M.*

The seed is farinaceous and oily; the herb an olus molle, and, were it not for the prickles, would be more used as such; for (as Dale says) *culinaris potius quam medicinalis videtur.* The quatuor aquæ pleuriticæ are, aqua Car- dui Mariæ, Cardui benedicti, Dentis leonis, & Scabiosæ, *Ph. Aug.* p. 4. Are they better than aqua pluvia? “*Folia tenera, demptis spinis, aliquando oleri-* “*bus non incommode addi, testis est Dodonæus.* Echini intractabiles . . . cal- “*losa squamarum cartilago, dulcis vesca.* Radix esculenta.” *J. B.* “Apud “*nos in Anglia, frequenter in hortis feritur, ad acetaria & usus culinæ.*” *R. H.* “The leaves are bitter, astringent, and redden strongly the blue paper: they “*seem to contain a salt like the oxyfal diaphoreticum Ang. Salæ.*” *T. Hist.* p. 323. where the juice of the leaves, or emulsiō seminum, is commended for the dropsy, rheumatism, pleurisy, peripneumony, and ague; as it is by others in the jaundice, gravel, &c. “*Lindanus (super praxim Hartmanni) semen* “*ut specificum adversus hydrophobiam proponit: quod egregie sudorem mo-* “*vet.*” *Geoff.* iii. 262. where you have an imagined analysis, and imaginary principles.

C A R T H A M U S.

S E C T. I.

Carthamus, Cnicus. *offic.* Cnicus sativus, sive Carthamum officinarum, *B. P.* 378. *H. Ox.* iii. 145. Carthamus, sive Cnicus, *J. B.* iii. 79. *Ger.* 1169. *R. H.*

R. H. 302. *Syn.* 196. Cnicus, five Carthamus fativus. *Park.* 259. Cnicus, five Carthamus. *Dod.* 362. Carthamus officinarum flore croceo. *T.* 457. Carthamus foliis ovatis, integris, margine aculeatis. *H. Cliff.* 394. Bastard Saffron, or Safflower.

It grows, they say, in Egypt, particularly on the side of the Nile about Cairo. "In agris feritur." *R. Syn.* In gardens it flowers in July and August; but never ripens the seed here. The flowers are used in dying; and saffron is sometimes adulterated with them: the seed only is used in medicine: it is white, cornered, oblong, and tapering, containing a white medulla, at first of a sweetish taste, then bitterish and nauseous; without smell.

It is probably the *κνικος* *Diosc.* l. 4. c. 190. p. 320; *κνικος*, or *κνικος* *Theophrasti*. "Carthamum dicitur hodie voce a Mauritanis mutuata, qui Karten "vocat." *Vid. B. P.*

S E C T. II.

It is cathartic, but operates disagreeably; called a phlegmagogue; and commended in coughs, asthma, anasarca, &c. It has been given in emulsion to ʒj. but is now rarely used, in Britain at least.

"Semen pituitam viscosam ac aquas vomitu ac dejectione purgat: confert maxime pectori. Calfacit et siccatur i. stomacho adversatur, ideoque corrigitur stomachicis, aniso, galanga, zingibere, &c. Dosis in substantia a ʒj. ad ʒiiss; in infuso a ʒij. ad vj. vel ultra. *Præp.* 1. Extractum Diacarthami, seu Cnicopharmacum. 2. Syrupus de Carthamo. 3. Electuarium Diacartham. 4. Species Diacarth." *Schrod.* 758.

It is of a nauseous taste, though neither acrid nor very bitter; was always reckoned cathartic; but hurtful to the stomach; and rarely given per se. Some birds eat it, and are said to grow fat on it. "Psittaci, quos vulgo vocamus Papagalli, avidissime Cnici semine vescuntur, nec tamen eorum alvus exolvitur." *Matth.* p. 889. "Psittaci, referente Matth. non solum innoxie semen Carthami esunt, sed et commode nutriuntur eo, et pinguescunt." *R. H.* 302. "Cnicus (*κνικος*) alvum dejicit." *Hippoc. de dieta*, l. 2. p. 347. "Alvum potius quam urinam movet." *Ibid.* p. 360. "Cnisi flore in oboloniis utuntur. Seminis vero contusi et expressi succus, ex hydromelite aut gallinacei jusculo, alvum purgat, sed stomacho adversatur, &c." *Dioscor.* l. 4. c. 190. p. 320. "Constat vero fastidiosum esse medicamentum, contrahens viscera, tardæque operationis." *Geoff.* ii. 464. N. B. His Rouge d'Espagne seems to be badly prepared, and can scarcely be called a scæcula. *Vid. p.* 465.

C A R V I.

S E C T. I.

Carvi, Carum. *offic.* Cuminum pratense. Carui officinarum. *B. P.* 158. Carum. *Dod.* 299. *H. Ox.* iii. 296. Carum five Careum. *Ger.* 1034. *K. H.* 446. *Syn.* 213. Carum vulgare. *Park.* 910. Caros. *J. B.* iii. 2, 69. Carvi. *Cæs.* 291. *T.* 306. Carum. *Fl. Lap.* 74. *H. Cliff.* 106. Caraway or Caroy.—This has a small

a small, oblong, striated, brown seed; of a warm aromatic taste, and fragrant smell.

"It grows in several places of Lincoln and Yorkshires, according to Mr. Ray. I have sometimes found it in the fields about the town, but suspect it to arise from seed accidentally scattered. The greatest part of the seed used comes from Germany." *Miller's Bot.* 120. In our gardens it flowers in June, and plentifully sows itself the second year.

"Carui. *Kαρος* Dioscoridi, l. 3. c. 66: *καρεον* Aëtio: *καρυαλαδιον* Simeoni Sethi, de alim: *Careum* Plin. l. 19. c. 8. a Caria regione in qua laudatissimum nascitur." *B. P.* Carum semen est exiguum vulgaris notitiæ, urinas ciet, exalfacit, stomacho utile, orique gratum; concoctionem adjuvat, ac utiliter antidotis & oxyporis admiscetur: denique non parva illi est cum aniso convenientia. Est & cocta radix edulis æque ac pastinacæ." *Dioscor.* l. 3. c. 66. p. 200.

S E C T. II.

It agrees in virtues with anise seed, and is used the same way, chiefly as carminative. The essential oil is pretty hot, and may be given to gut. iij. or iv. with sugar. The semen confectum is common in confectioners shops. The root is esulent.

"Alfacit & siccit 3. discutit, attenuat, stomachicum est ac diureticum, lactis abundantiam præbet. Hinc usus ejus insignis in colica, vertigine, &c. cum interne, tum externe applicatum. *Præp.* 1. Confectum semen. 2. Condita radix, sed raro. 3. Aqua stillat. ex planta integra. 4. Oleum, ex semine sicco destillatum." *Schrod.* 557.

It is a very oily aromatic, somewhat hot but not acrid to the taste. "Semen sapore acri & aromatico." *J. B. R. H.* "Saporis acris aromatici, odoris fragrantis." *Herm. Cyn.* 279. *Dale* 125. "Saporis calidi aromatici, specifici, odoris fragrantis." *Nucl. Belg.* 64. It is not so pleasant to me indeed as the sem. anisi is, but generally liked, and even by children, at least when confected, or made into bread. "It is of a warm aromatic pleasant taste." *Miller*, l. c. "The herb also, and the root thereof, is better food than the parsnep, and is pleasant and comfortable to the stomach, helping digestion." *Park.*

"The essential oil of Carvi is very acrid and very penetrating: it is ordered to gut. v. or vj. in ol. amygdal. dulcium ʒv. or ʒvj." *T. Hist.* p. 254. "Oleum essentielle, aromaticum & exurens a gut. iij. ad vj. præscribitur. "Semen pulveratum a ʒj. ad ʒj. usurpatur, vel infusum ʒj." *Geoff.* iii. 266. where see his imaginary analysis; and the composition of the rosfolis des six graines. The semina quatuor calida majora are fœniculi Carvi, Cumini, Anisi.

C I C E R A.

S E C T. I.

- i. Cicer, Cicer rubrum. *offic.* Cicer sativum. *B. P.* 347. *T.* 389. *H. Ox.*
- ii. 75. *Ger.* 1222. *R. H.* 917. Cicer arietinum. *Dod.* 525. *J. B.* ii. 292.

Cicer fativum five arietinum, rubrum, nigrum, vel album. *Park.* 1075. Cicer foliolis serratis. *H. Cliff.* 370. Chick-peas or Cicers:—These are somewhat bigger than common peas, round, with a protuberance like a little horn at the eye, of different colours (white, red, or black) of a sweet leguminous taste like peas, and of no smell.

Where they grow wild is not known; but they are commonly sown in the fields in France, Spain, Italy, &c. as they were of old, for their use in food, as peas are with us. Cicer, Græcè *ἑρβινθος*, is not described by *Dioscorides*, l. 2. 126. p. 129. though he mentions a fativum, arietinum, and sylvestre. See there a superstitious cure for warts. *Theophrastus*, l. 8. hist. c. 5. p. 937. has three kinds of it also. *Vid. Bod.*

2. *Ervum*, *Orobus*. *offic.* *Orobus* filiquis articulatis, semine majore. *B. P.* 345. *Moschus* five *Cicer fativum*. *Dod.* 524. *Orobus* five *Ervum multis.* *J. B.* iii. 321. *Orobus* receptus herbariorum. *Lob. Adv.* 400. *Ger.* 1225. *Orobus vulgaris* herbariorum. *Park.* 1078. *Orobus fativus* five *Ervum semine anguloso*, filiquis inter grana & grana junctis. *H. Ox.* ii. 74. *Ervum verum Camerarii.* *T.* 398. *Ervum leguminibus pendulis.* *H. Cliff.* 370. The Bitter Vetch—has round, whitish seeds, about the bigness of pepper, and tasting like Cicers or Peas. It grows about Montpelier, Geneva, &c. This cannot be the *Orobus* of the antients, though used for it, (*vid. Diosc.* l. 2. c. 132. *Bod. in Theoph.* p. 923. col. 2.) since it is neither unpleasant nor bitter, nor so acrid as to evacuate blood by urine or stool; neither do its seeds touch one another in the pods. *Vid. Theoph.* 8. hist. 5. p. 937.

3. *Faba*. *offic.* *Faba*. *B. P.* 338. *R. H.* 909. *Syn.* 323. *Faba major hortensis.* *Ger.* 1209. *Park.* 1073. *Faba sativa.* *Park.* par. 521. *Faba cyamus leguminosa.* *J. B.* ii. 278. *Faba major*, five *bœna major Dodonæi.* *H. Ox.* ii. 83. *Bœna*, five *phaseolus major.* *Dod.* 513. *Faba*, flore candido, lituris nigris conspicuo. *B. B.* 338. *T.* 391. *Vicia caule recto*, petiolis absque cirrhis. *H. Cliff.* 369. Garden Beans.

There are many varieties of it; but where any of them grow naturally is not known. “Crescendi locus plantarum cultissimarum, ab omni ævo, apud botanicos obscurus fuit.” *H. Cliff.* 369. It is *κυμανος* in Greek. *Vid. Diosc.* l. 2. c. 127. p. 130. “*Faba* inter legumina sola potissimum erecto caule constat.” *Theoph.* l. 8. hist. c. 3. p. 914. *Vid. & l. 7. c. 3. & l. 4. c. 2. ac Plin.* l. 18. c. 7. p. 448. “*Fabæ* multiplex usus omnium quadrupedum generi, præcipue homini.” *Plin.* l. 18. c. 12. p. 458.

4. *Fœnum Græcum*. *offic.* *Fœnum Græcum fativum.* *B. P.* 348. *T.* 409. *Park.* 1096. *H. Ox.* ii. 166. *Fœnum Græcum.* *Dod.* 536. *J. B.* ii. 363. *fœnugræcum*) *Ger.* 1196. *R. H.* 954. *Medicago*, leguminibus fere solitariis, sessilibus, erectis, reflexo-falcatis, acuminatis. *H. Cliff.* 376. *Fenugreek*.—This has a smaller, quadrangular, yellowish-brown seed, with an oblique furrow in it, of a leguminous taste and strong smell.

The *Fœnum Græcum sylvestre.* *B. P.* Wild *Fœnugreek*, grows about Montpelier. Though the manured *Fœnugreek* is easily cultivated, and very fertile, yet the seed of it “comes from Germany.” *Mil. Bot.* 202. “*Fœnum Græcum*, *τῆλιν* *Dioscorid.* l. 2. c. 124. *Theoph.* 3. hist. 17. cui & *βουκερος* 8. hist. 8. *καραιτνης*, & *διγοκερος*, Græcis; a filiquarum similitudine: quare *Columella*, l. 2. c. 11. simpliciter filiquam; Varro filiculam; *Plinius*, l. 18. “ c. 16..

“ c. 16. Siliciam, & l. 25. c. ult. Fœnugræcum vocavit.” *B. P.* “ Fœnugræcum, ita enim in *Collumellæ* & *Plinii* codicibus scribitur, Græcis *τῆλιν*, “ &c.” *R. H.* I do not find Fœnugræcum in Dalecamp’s Pliny; but l. 25. c. ult. he has twice Fœnogræco, and thrice Fœnigræci, in one word, not Fœni Græci.

5. Lens, Lens vulgaris. *offic.* Lens vulgaris. *B. P.* 346. *T.* 390. Lens, *J. B.* ii. 317. *H. Ox.* ii. 59. *R. H.* 904. Lens minor. *Dod.* 526. *Ger.* 1224. *Park.* 1067. Cicer pedunculis bifloris, seminibus compressis. *H. Cliff.* 370. Common Lentils:—which have round, flat, brownish-yellow seeds, of a leguminous taste like the Cicers or common Peas.

“ Lens vulgaris. *B. P.* sparsim in satis conspicitur.” *Bot. Monspel.* p. 152. An spontè? “ Seritur in agris Cantabrigiensibus, Huntingtoniensibus, &c. “ sola, & hordeo mixta.” *R. Syn.* 323. It is not described by *Dioscorides*, l. 2. c. 129. p. 131. It is *φανος*, in Greek, & sometimes *φανη* in *Theoph.* *Vid. Bodæum in Theoph.* p.

6. Lupinus. *offic.* Lupinus sativus, flore albo. *B. P.* 347. *T.* 392. Lupinus sativus. *Dod.* 529. *Lob.* 515. *Ger.* 1217. *R. H.* 906. L. sativus, albus. *Park.* 1073. L. vulgaris, semine & flore albo, sativus *J. B.* ii. 288. L. vulgaris seu sativus albus. *H. Ox.* ii. 86. Lupinus caule composito. *H. Cliff.* 359. White Lupines—have pretty large, flat, roundish, white seeds, of a leguminous and bitter taste.

Where it grows naturally I know not. *Dioscorides*, l. 2. c. 132. p. 133. has a Lupinus (*Σεπμος* in Greek) sativus, and c. 134. Lupinus sylvestris, but describes neither. “ Aqua si macerentur, amarorem exuunt. In Italia in “ agris feruntur; non modo ad alimentorum usum, sed (si Matthiolo credimus) ad agros impinguandos. Et Plinius pinguescere hoc satum arva vineas “ que dixit, ita ut optimi fimi vicem representet.” *R. H.* 907.

S E C T. II.

They are all farinaceous, acescent, incrassating, and nourishing; and hence antiseptic. They are commended in many diseases, but used more in food than in medicine inwardly. Outwardly (in cataplasms) they are discutient, maturating, and deterfive; though Fœnugreek only is thus applied.

“ Cicera calfaciunt & siccant 1. emolliunt, abstergunt, discutiant, diuretica sunt ac lenientia; proin conducibile est eorum decoctum nephriticis. “ Extrinsecus adhibetur farina in cataplasmatibus, &c.” *Schrod.* 565. Qui Ervum non habet.

“ Ervi semen, ob farinaceam mucaginem respondet Fœnugræco in emolliendis & maturandis abscessibus; sed quoniam, more omnium leguminum, “ gaudet sale diuretico, ideo medetur urinæ (difficultate) & calculo pellendo.” *Herm. Cyn.* p. 421.

“ Fabarum farina emplastica est, refrigerat & siccant 1. incrassat, extergit, “ utilis intra corpus in diarrhœa, lienteria, &c. Extra in maculis sole contractis, aliisque cutis sordibus extergendis (si illa fricentur) in fugillatis discutiendis. *Præpar.* 1. Aqua, ex floribus. Diuretica est, maximique usus “ in maculis faciei extergendis, eaque fucanda. 2. Sal com. ex stramine in-

“ cinerato. Summum diureticum est, usitatissimumque in hydropo, calculo, et urina retenta.” *Schrod.* 589.

“ Fœni Græci semen calfacit 2. siccat 1. emollit, digerit, maturat, discutit, paregoricum est, ususque adeo famosi ut cataplasma dictarum intentionum chirurgis vix usitatum fuit, quin Fœnugræcum vel hujus mucilaginem contineat; crebrique usus est in clysteribus emollientibus, mucilaginosa quippe sua substantia obtundit acrimoniam, intestinaque erosa oblnit. Insuper conducit ejus mucilago ad oculorum sugillationes discutiendas (imposita). *Præpar.* Mucilago. Extrahitur beneficio coctionis in aqua.” *Schrod.* 591.

“ Lens oculorum aciem obtundit, ægre concoquitur, stomacho incommoda est, eumque & intestina inflat, alvum sistit; ad nervos, pulmonem, & caput incommoda est. *Diosc.* Dale 219. “ Lentescunt, incrassant, & nimium humorum motum sedant.” *Nucl. Belg.* 170. *Geoff.* iii. 701. ad 707. is de lente, of which about three are on the controversy whether they are good in variolis & morbillis. *Vid. Hoffm.* 281. *Quot mira de lente! Schroder* has neither Lens nor Lupinus.

“ Lupinus menses & foetum elicit, lumbricos pellit. Externe achôres, pustulas, pforas, gangrænas, et ulcera maligna juvat.” *Dale* 219. “ In lumbricis præsertim si pueri laborent, cautiores nos faciat Aver. qui quinque coll. 39. ait occidere. Quare non oportet intus dare, &c.” *Hoffman* 320. § 10. *Vid. Sim. Paulli Q. B.* p. 78.

They all (as well as Pîsa, Viciæ, Phaseoli, and other legumina) consist of a solid, farinaceous, somewhat oily substance; are flatulent, and of hard digestion for weak stomachs; but yield good nourishment and hearty food to the robust and laborious people accustomed to much muscular motion. But while young and green (I mean such as are commonly eaten every where) they abound with a saline, as it were saccharine, diluent juice, and are easy of digestion. The farina of any of them may be used in discutient as well as suppurating cataplasms; though the Fœnugræcum, being the most viscid, is most commonly preferred to the rest, and applied only externally. The Lupines are said to kill and expel worms, not only taken inwardly, but even outwardly applied: and the same virtue is attributed to the Cicers, which are made deobstruent, yea and lithontriptic by the antients. *Credat qui vult.* Fœnum Græcum only is retained in the *New London M. M.* and really only in use in Britain. A sal fixum is ordered to be made of Bean-stalks in our *Pharmacop.* but I believe it is seldom done; nor is it worth the pains, if they afford so small a quantity of it as Mr. *Geoffroy's* analysis assigns. viz. fol. et stipit. recentium lbv. salis fixi alcali 3j. gr. l. which, however, is gr. xxx. more than the same quantity of green brakes yield. *Vid. Geoff.* iii. p. 459. et 474; who gives the analysis Fabarum et recentium, et exsiccatarum. *Ib.* p. 459; Fœni Græci, p. 485; lentiumque, p. 703. His analysis Cicerum I take to be conjectured, as are the principles of the Lupines. *Vid.* p. 318. et 753.

Secundum D. Geoffroy, l. c. analysi chymica præbuerunt lbv. exsiccatorum seminum.

	Fabæ.				Fænigræci.				Lentis.			
	lb.	ʒ.	ʒ.	gr.	lb.	ʒ.	ʒ.	gr.	lb.	ʒ.	ʒ.	gr.
Humorum	2	03	4	32	1	13	5	11	2	04	2	00
Sal. v. urin.	0	01	0	64	0	00	1	28	0	00	0	00
Olei	0	05	6	48	1	01	1	31	0	07	4	00
Carbonis	1	04	4	32	1	03	4	48	1	05	7	00
Jacturæ	0	15	7	40	0	12	3	26	0	14	3	00
Cinerum	0	02	1	56	0	03	0	12	0	01	7	00
Sal. alcali	0	01	1	32	0	00	6	07	0	00	5	00
Terræ	0	01	0	24	0	02	2	05	0	01	2	00

There is ʒj. wanting to make up the sum in the Lentils only. N. B. The sal volatile & oleum, & terra. Nihil omnino explicat G. imo potius confundit omnia: e. gr. p. 461. fenugreek is in the decoctum emolliens pro fotu, & farina orobi (vel tritici) in the trochisci scillitici.

L E C T U R E LXIX.

C I T R U L L U S, &c.

S E C T. I.

1. *Citrullus. off.* Anguria, *Citrullus dicta.* B. P. 312. T. 106. R. H. 643. Anguria. *Matth.* 396. *H. Lugd.* 625. *H. Ox.* ii. 28. Anguria, Cucumis, *Citrullus.* *Dod.* 664. Anguria sive *Citrullus vulgarior.* *Park.* 771. *Citrullus officinarum.* *Lob.* 304. *Ger.* 913. *Citrullus folio colocynthidis secto, semine nigro, quibusdam Anguria.* *J. B.* ii. 235. Cucurbita, feminum margine basi dilatato. *H. Cliff.* 452. (At Cucumis species est secundum *Lin. G. Pl.* edit. 2. p. 467.) Water Melon, or Citruls.—These have flat, oval, margined seeds, more pointed at one end than at the other, of different colours, commonly black or red, containing a white kernel.

It grows in Naples, Sicily, Jamaica, &c. “Anguriæ voce primum Aëtium usum esse volunt: alias *Citrullus*, a citreo colore dicitur. Peponem “*Dioscoridis, Galeni, & Plinii, & Arabum Battecha* esse volunt.” B. P. vid. *N. Myreps.* 367. and *Hoffm.* 208.

2. *Cucumis, Cucumis hortenſis. off.* Cucumis sativus vulgaris, B. P. 310. T. 104. *H. Ox.* ii. 31. *Cucumis vulgaris.* *Dod.* 662. *Ger.* 910. R. H. 645. C. sativus. *Park.* 772. C. vulgaris, viridis & albus. *J. B.* ii. 245. *Citreolus vulgò.* *Ces.* 199. *Cucumis foliorum angulis rectis.* *H. Cliff.* 451. Common Cucumber.—The seeds are longish, oval, flat, pointed at both ends, and of a white or straw colour.

Where it grows wild, and whether it was known to the ancients, I know not. vid. *Hoffm.* p. 204. “*Ετι σικυος* nomen apud Græcos (quemadmodum “*Cucumeris* apud Latinos) generale sit nomen omnium horariorum fructuum, “*viz.* Peponum, Melonum, Cucumerum, Anguriarum, &c ejusdem generis;

“ attamen σικυς ἡμερος Dioscoridis, l. 2. c. 163. & Theoph. 1. hist. 18. aliis
 “ σικυον & κιχυον, Cucumer Plinio, l. 19. c. 5. Cucumis Varroni, a curvore
 “ quasi curvimer, dicitur.” B. P.

3. Cucurbita. *offic.* Cucurbita lagenaria flore albo, folio molli. B. P. 313.
 H. Ox. ii. 23. Cucurbita lagenaria. J. B. ii. 216. T. 107. Ger. 923. R. H. 638.
 Cucurbita lagenaria major. Park. 769. Cucurbita, feminibus obsolete bicorni-
 bus, H. Cliff. 451. The Gourd, or Bottle Gourd—has pretty large, longish
 seeds, pointed at one end, two-horned at the other, flatted and striated, of a
 light-brown colour.

This grows in America, and sometimes to a vast bigness. “ Cucurbita,
 “ κελοκυνθα ἐδωδιμος, Dioscoridi, l. 2. c. 162. (p. 144.) ad differentiam κολο-
 “ κυνθιδες, dicitur: Latinis Cucurbita a concurvatu, quod facile si quid ob-
 “ stiterit, quo minus extendatur, incurvatur: Calabassi seu Cucurbitæ in India
 “ ad miraculum usque augefcunt. Species prope infinitæ sunt, &c.” B. P.

4. Melo. *offic.* Melo vulgaris. B. P. 310. T. 104. H. Ox. ii. 29. Melo,
 five Melopepo vulgo, Cucumis Galeni. Dod. 663. Melones. J. B. ii. 242.
 Melo. Ger. 910. R. H. 644. Park. par. 525. Melopepo. Lugd. 623. Cucu-
 mis, foliorum angulis rotundatis. H. Cliff. 451. The Musk-Melon.—The seeds
 of this are like those of the cucumber, except that they are somewhat larger,
 and not so sharp pointed.

Does it grow in Egypt? “ Hoc genus Palladius Melones, quasi μηλωνας,
 “ i. e. Pomeos, a malorum figura appellavit; quod nomen adhuc in usu est.
 “ At Melon Theophrasto Sycion; Plinio, Cucumis Mali cotonei effigie; Me-
 “ lopepo Galeni: forte Cucumis Antiquorum.” B. P. “ Melo vulgi, five
 “ Cucumis Antiquorum, Dioscoridis Melopepo. Lob. Adv. 285. “ Varieta-
 “ tum hujus apud hortulanos infinita farrago.” H. Cliff.

5. Pepo. *offic.* Pepo oblongus. B. P. 311. T. 105. H. Cliff. ii. 26. R. H.
 641. Pepo major oblongus. Dod. 665. Pepo maximus oblongus. Ger. 919.
 Pepo. Park. par. 526. Cucurbita margine integro tumido. H. Cliff. 452.
 Common Pumpkin, or Pompkin—which has pretty large, flat, oval seeds,
 pointed at both ends and margined, and of a white or yellowish colour.

Where it grows naturally is not known. “ Pepo, πεπων. Dioscoridi, l. 2.
 “ c. 164. (p. 145.) Plinius, l. 19. c. 5. (p. 495.) scribit, Cucumeres cum
 “ magnitudine excefferunt, Pepones vocari.” B. P. “ Ego certe cum in
 “ Italia peregrinarer miratus sum Italos Cucumerem Citrullum appellare; Me-
 “ lones autem aquaticos & Pepones, Cucumeres.” R. H. 644.—These seeds
 are commonly kept mixed in the shops; and, though five in number, are
 commonly called semina quatuor frigida majora, viz. Citrullus, Cucumis, Cu-
 curbita, deinde Melonum; either the Melon or Pumpkin seed being taken for
 the last; or both. N. B. Dioscorides has περι πεπονος, and σαρξ πεπονος, not
 πεπωνος. And Homer Ω πεπονες κακ' ἐλεγχέ, Ἀχαιίδες, ἐκ ἐτ' Ἀχαιοι. Il. B.
 v. 325.

S E C T. II.

In emulsions these seeds are diluent, antacid, and diuretic; but not so nou-
 rishing as almond-milk; yet more cooling; and of great use in heat of urine,
 gravel, acute and inflammatory fevers, &c. The fruits themselves may be
 of use in hot constitutions and climates.

“Citrulli (vel) Anguriæ semen est ex quatuor sem. frig. majoribus; refrigerat itaque & humectat ad gr. ij; est diureticum, aperiens, acrimoniam obtundens. Inservit præcipue renibus ac vesicæ abstergendis, bilis ac sanguinis æstui compescendo.” *Schrod.* 569.

“Cucumeris semen (seu nuclei) refrigerat & siccatur (præcipue si aridum sit, alias humectatur) in fine gr. i. abstergit, aperit, urinam ducit, usque creberrimi est in emulsionibus antipleuriticis, antiphreniticis & similibus. Ipsa Cucumerum substantia, refrigerat & humectat. Excrementitii est succi, adeoque non nisi robustioribus ventriculis edendus, idque non sine corrigentibus condimentis, v. g. pipere & sim. *Præp.* Condit. fructus cum sale communi.” *Schrod.* p. 576.

Officin. “Cucurbitæ semen & nonnunquam folia. Cucurbita convenit viribus cum Cucumere, tam in qualitatibus carnis, quem in seminis facultatibus. Folia recentia puerperarum mammis adhibita, monente Matthiolo, lac imminuunt. *Præp.* aqua stillat. ex fructu immaturo; fert opem omnibus inflammationibus externis, oculorum, aurium, podagricis, &c. Intrinsecus quoque mirabiliter æstum corporis mitigat. N. Succus expressus idem facit.” *Schrod.* p. 576.

“Melonis fructus, seu pulpa, refrigerat & humectat, nutrimenti est mali, putrescibilis, febribus ac torminibus generandis apti. N. minus nocet coctus, potuque vini & pipere correctus. Semen aperit & abstergit, epaticum est ac nephriticum, eapropter confert tussi, phthisi & febribus; medetur stranguriæ, ardorem urinæ, sitimque sedat, &c. Cum reliquis sem. frig. maj. in omnibus convenit. *Præp.* Melones conditi.” *Schrod.* p. 623. N. B. “Matthiolus majores vocat Pepones, minores Melopepones.” *Ibidem.*

The kernels of all these seeds are farinaceous, oily, of an agreeably sweet taste, and make a very pleasant emulsion. The fruits are not proper for weak stomachs; and generally require something to correct their coldness, and promote their being digested. They are as generally owned to afford no good nourishment; but rather to weaken than strengthen nature. *An a sale essentielle nitroso?* Hence they seem to be more cooling than almonds. They are all however banished the *London M. M.*—They keep well. Melon seed is reckoned the better for sowing, the older it is: and when forty-two years old is said to have sprung up and prospered well: vid. *Phil. Transf.* N°. 464. p. 115. or *Abridg.* vol. viii. part 2. p. 824. I do not know how long they continue good.

“Analyti chymica ex seminum Cucurbitæ a cortice mundatorum lbv. prodierunt humorum ℥xviij. 3j. gr. xliv; olei lbij. ℥v: massa relicta pendebat ℥xij. gr. xvij; unde calcinatione fuerunt massæ nigræ ℥v. 3ij. gr. liv, ac inde talis fixi leviter alcali gr. xv. (ergo terræ nigræ ℥v. 3ij. gr. xxxix.) jactura fuit ℥xij. 3vj. gr. x. Ammoniacalem salem continent. . . Caro stomachum relaxat, & omne bibendi desiderium restinguit.” *Geoff.* iii. 381. “Cucurbita sitim sedat, urinam ciet & ventrem movet, semen genitale minuit, & Veneris appetentiam extinguit.” *R. H.*

“Analyti chymica ex carnis Citrulli lbv. prodierunt humorum lbiv. 3xiv. 3iv. gr. xij; olei 3iiij. Carbonis fuerunt 3vij. gr. lxij; unde cinerum 3iv. gr. xij, ac inde salis fixi alcali 3ij. gr. xxvj. (ergo terræ 3j. gr. lvij.) Jactura fuit.

“ fuit ʒj. gr. xxxiv. Sal effentiale tartareum & ammoniacale continet.” *Geoff* iii. 340.

“ Analyſi chymica ex Cucumeris fructus nondum bene maturi lbv. prodierunt humorum lbiv. ʒxiv. ʒij. gr. xxx; olei ʒij. gr. xvij.—Carbo pendebat ʒj. ʒiij. gr. xxiv, unde cinerum ʒvj. gr. xlvij; ac inde ſalis fixi alcali ʒiiſ. (ergo terræ ʒiv. gr. xij.) Jactura fuit nulla. Salem effentialem obtinet tartareum parcum.” *Geoff* iii. 373. who is prolix enough on the different ways of dressing and eating cucumbers.

Dodonæus thinks Cucumbers more eaſily digeſted than Melons. *J. B.* is of a contrary opinion. Mr. Ray agrees with Dodonæus, and ſtands up an advocate for cucumbers. vid. *R. H.* 645 and 646. Neither of them agrees with every ſtomach.

C O R I A N D R U M.

S E C T. I.

Coriandrum. offic. *Coriandrum majus. B. P.* 158. *T.* 316. *H. Ox.* iii. 269. *Coriandrum. Dod.* 302. *Lob.* 403. *J. B.* iii. 2, 89. *Ger.* 1012. *R. H.* 470. *Syn.* 221. *Coriandrum vulgare. Park.* 918. *Coriandrum fructibus globosis. H. Cliff.* 100. Common Coriander—which produces round ſpherical (or hemiſpherical and concave) ſtriated ſeeds, of a yellowiſh-gray colour, a warm ſweetiſh aromatic taſte, and fragrant ſmell.

It grows in France and Spain, &c. In gardens it ſows itſelf plentifully, flowering in June. It is *κοριον*, or *κοριαννον*, in *Dioſcor.* l. 3. c. 71. p. 202. who does not deſcribe it. It was probably ſo called from *κορις* cimex, becauſe the green herb, ſeed and all, ſtinks intolerably of bugs. It is *κοριαννον* and *κοριαννον* in *Theophrastus* 7. hiſt. 1. & 4. cauſ. 3; *Coriandrum Plinio*, l. 20. c. 20. p. 533.

S E C T. II.

It is a diaphoretic and carminative aromatic; ſaid to be ſtomachic; and is commended for weak and windy ſtomachs, vertigoes, &c. and as a corrector of griping purgatives.

“ Stomachicum imprimis eſt, calfacit & ſiccatur ad gr. iij. aſtringit: Hinc celeberrimum in laxitate ſtomachi, ſi poſt cibum aſſumatur; claudit enim ventriculum, exhalationeſque ſupprimat, quo minus caput gravent, ruſtuſque producant. *Præp.* 1. Præparatum ſemen. Maceratur per noctem in aceto, dein exſiccatur. 2. Confectio ex ſemine præparato. 3. Aqua ſtillat. 4. rari uſus. 4. Oleum.” *Schrod.* 571. Vid. *Galen de Simpl. fac.* l. 7. p. 52. C.

1. Though the green ſeed is abominably fetid; yet, when ripe and dried, it is a warm aromatic, and ſmells agreeably. Vim habet refrigeratorem, ſays *Dioſcorides*; ſed perperam, adds *Galen*. *Simeon Sethi* agrees with *Galen*; as does *Avicenna* with *Dioſcorides*. Vid. *Matth.* p. 558. — 2. *Dioſcorides* (*Alexipharm.* c. 9.) ſays alſo, “ Si largius ſumptum fuerit ſemen, mentem, non ſine periculo, e ſua ſede & ſtatu demoveret.” l. c. and elſewhere. “ *Coriandrum* propter

“ propter odorem latere non potest: epotum vocis raucitatem facit, atque infaniam, qualis ex vinolentia proficiscitur, ita ut qui sumpsere varia dictu pudenda blatterent: tota vero corpore Coriandri odor sese prodit.” Yet the green herb is much used in Egypt; “ Etenim ferculum non parant sine foliis Coriandri, quanquam ingratis oleat.” *Alpin. de Pl. Ægypti.* p. 131. It is eaten also in Spain, and reckoned a cordial.” “ At Hispani, autore *Amato*, frequentissime illo utuntur, & pro cordiali habent. Verum ut experientia docuit monachos in Mesu: propter hunc usum Hispanorum plurimos esse fatuos, ob quorum curam tam frequentia sunt hospitalia. Ita in Ægypto esse potest, licet *Alpinus* non observavit.” *Hoffm.* p. 193. vid. *Bod. in Theoph.* p. 747. But whatever is in this, the seed is innocent, needs no preparation, and is used like the sem. quatuor calida majora. “ Oleum essentielle tenue, odorum & aromaticum, analysi chymica suppeditat, cum phlegmate acido, & aliqua spiritus urinosi portione.” *Geoff.* iii. 358. But who analysed it?

CUCUMER. *Vide* p. 346.

CUCURBITA. *Vide* p. 347.

C U M I N U M.

S E C T. I.

Cuminum. offic. Cuminum femine longiore. *B. P.* 146. Cuminum. *Lob.* 428. *M. U.* 4. *H. Ox.* iii. 271. Cuminum sive Cyminum sativum. *J. B.* iii. 2, 22. *R. H.* 433. Cuminum sativum Dioscoridis. *Ger.* 1066. Cuminum vulgare. *Park.* 887. Fœniculum orientale, Cuminum dictum. *T.* 312. Cummin seed. *R. H.*—Cummin has an oblong, striated, greenish or grayish brown seed, somewhat bigger than fennel seed, of a warm, bitterish, aromatic taste, and strongly fragrant smell.

“ I know not where it grows wild; but it is cultivated in many countries, particularly in Malta and Sicily, “ from whence we had the seeds.” *Miller's Bot.* 164. “ I have had ripe seed from it in the garden several times. *Miller's Dict.*

“ *Κυμινον*, Dioscoridi, l. 3. c. 68. Theoph. 7. hist. 4: at Plinio Cuminum, “ l. 19. c. 8. & l. 20. c. 14 & 15. *B. P.* But whether this be the same with “ our Cummin, I cannot determine. vid. *Bod. in Theoph.* p. 752. “ Cuminum sativum stomacho est utile, sed multo magis Æthiopicum quod Hippocrates regium appellavit. Secundum locum tenet Ægyptium: mox reliqua sequuntur, &c.” *Dioscor.* l. 3. c. 68. p. 201. vid. *Ammi.*

S E C T. II.

It is somewhat stronger than fennel or carvi seeds; called stomachic; and commended internally for wind in the bowels, vertigo, &c. and outwardly as discutient and anodyne, for swellings, stitches, fixed pains, pains after childbirth, &c. in clysters, epithems, and plaisters.

“ Cal-

“Calfacit & siccat 3. attenuat, digerit, resolvit, flatus discutit, utile in colica, tympanite, vertigine. *Præp.* 1. Aqua, ex semine. 2. Oleum stillat. 3. Species Diacumino.” *Schrod.* 577.

It is subacrid, oily, and strongly aromatic; and one of the greater hot seeds. “Semen gustu subamaro, tenui, mediocriter acri, & cum gravitate suaviter odorato.” *J. B. R. H.* “Odoris aromatici nonnihil ingrati, saporis subamari aromatici.” *Nucl. Belg.* 95. “Saporis subamari, aromatici, acris, ingrati; odoris admodum gravis & vehementis, non insuavis, columbis maxime grati.” *Geoff.* iii. 383. “Analyti chymica plurimum præbet olei, phlegmatis tum acidi tum urinosi. Salem igitur essentialem obtinet ammoniacalem, oleosum, aromaticum.” *Ibid.* Alia conjectura! It may be given in substance to ʒj; in infusion to ʒij. and upwards; the oil to gut. x. but seldom above gut. iij. Cummin is in the emplastrum anodynum, emplastrum antihystericum; and there is an empl. e Cymino in the *New Lond. Pharmacopœia*.

“Quæritur, an quod Cumino tribuerit Dioscorides faciem & corpus decolorandi, fiat peculiari & occulta proprietate? Videtur quibusdam. Nam Hippocrates 2. hum. 34. scribit, & videntibus & olfacientibus obesse. Et Galen, ibi ait diserte, facere impallefcere corpus. Et Dioscorides, cutis colore bibitum illitumve mutat in pallorem. Sed tollunt litem Avic. & Serap. nimium usum id facere. Quia enim vehementer discutit, & consequenter siccat, foris quidem absumit id sanguinis, quod floridam faciebat cutim: intus autem mutat sanguinem in bilem.” *Hoffman*, p. 210. An extraordinary query, and as extraordinary an answer!

D A U C U S.

S E C T. I.

1. *Daucus*, *Daucus vulgaris. offic.* *Pastinaca tenuifolia, sylvestris Dioscoridis, vel Daucus officinarum. B. P.* 151. *M. U.* 31. *H. Ox.* iii. 305. *Pastinaca sylvestris tenuifolia. Dod.* 675. *Ger.* 1028. *Park.* 901. *Pastinaca sylvestris, five staphylinus Græcorum. J. B.* iii. 2, 62. *R. H.* 465. *Daucus vulgaris. Clus. H.* ii. 198. *T.* 307. *R. Syn.* 218. *Daucus feminibus hispidis. H. Cliff.* p. 89. Wild Carrot, or Bird's nest.—This bears small, roundish, bristly, grayish seeds, of a warm aromatic taste, and not unpleasant smell.

It is common in pasture grounds, and among corn, flowering in June and July. “*Pastinaca sylvestris (σταφυλινος ἀγριος)* folia habet gingidii, at latiora & subamara, caulem rectum, scabrum; umbellam similem anethi, in qua flores insunt candidi, ac in medio exiguum quiddam colore purpureo, & fere ad croceum inclinante. Radix est digiti crassitudine dodrantalis, odorata, & si decoquatur esculenta. . . Hortensis vero *Pastinaca* cibo aptior.” *Dioscor.* l. 3. c. 59. p. 198. *An Daucus nostras?*

2. *Daucus Creticus. offic.* *Daucus foliis fœniculi tenuissimis. B. P.* 150. *Daucus Creticus semine hirsuto. J. B.* iii. 2, 56. *R. H.* 463. *Daucus Cretensis. Lob.* 416. *Daucus Cretensis verus, Ger.* 1029. *Daucus Creticus verus Dioscoridis. Park.* 896. *Myrrhis annua, semine striato villoso incano. M. U.* 67. *T.* 315.

T. 315. Myrrhis tenuifolia annua Cretica, semine lanugine alba pubescente. *H. Ox.* iii. 302. Athamanta foliis capillaribus, seminibus hirsutis. *H. Cliff.* 93. Candy Carrots.—The seeds are oblong, slender, hoary, and hairy; of an acrid aromatic taste, and agreeable but not fragrant smell.

It grows in Germany, Crete, &c. “Variat foliis et tota planta hirsuta ac glabra, observante *J. B.* Nostra glabra est.” *H. Cliff.* 93. vid. *B. J.* 69. N°. 9. & 11. “Daucum aliqui *διγκαιον* vocant. Ac Creticum quidem foliis est fœniculi similitudine, at minoribus atque tenuioribus, caule dodrantali, umbella coriandri, floribus candidis: atque inter hos, semine acri, albo, hirsuto, ac suavis in mandendo odoris. Radix est digitali crassitudine, & dodrantalis longitudine. In saxosis apricisque locis provenit.” *Dioscor.* l. 3. c. 83. p. 206.

S E C T. II.

They are attenuant, diuretic, and carminative; called uterine; and commended in female obstructions, flatulent and nephritic colics, strangury, stone, hickup, &c. agreeing in virtues with Ammi, when used in the same manner. The *D. Cretic.* is in the *Mithridatium* et *Theriaca*.

“Dauci Cretici semen uterinum imprimis est, & diureticum; calfacit & siccat 2. aperit, incidit, flatus discutit. *Ufus præcip.* in mensibus obstructis, suffocatione & dolore matricis, in colica flatulenta, in singultu, dysenteria, tussi chronica. *Schrod.* p. 582.

“Pastinaca sylvestris eisdem prædita est viribus quibus Daucus Creticus, cujus quoque loco in compositionibus commode adhiberi potest. Semen calfacit & siccat 3. radix paulo imbecillius; herba adhuc minus: attenuat, aperit. *Ufus præcipui* in tussi, pleurisi, stranguria; resarat epar, lienem, ureteres; ciet menses & molas, sedat matricis suffocationes; stimulat Venerem. Extrinsecus convenit radix pessariis; exiccat herba catarrhos (in lotionibus capitis) parturientium partum promovet (in suffitu). *Præp.* 1. Confectum semen. 2. Aqua stillatitia, ex tota herba cum floribus, ac radicibus, Julio collecta. 3. Oleum stillat. ex semine.” *Schrod.* p. 664.

They are oily and aromatic, and one of the sem. calida minora: and mostly used as a diuretic and carminative. “Memini Consiliarii, cujus ante de esu asparagi mentionem feci. Is enim cum per quindenae singulas soleret misere decumbere; usus deinceps cervisia, cui semen Dauci incoctum est, liber a lithiasi vixit modo per aliquot annos.” *Helmont. Lith.* c. 7. § 14. p. 46. “In monasterio rubeo Zoniæ, prope Bruxellam, ac templi sacrario, spirant fontes aliquot, saxa qui parieti apponuntur; contra adagium, *Gutta cavat lapidem sæpe cadendo*. Unco namque & securi frequenter saxa adnata decutiunt. Monachi autem queruntur, se strophos sive tormina pati, nisi semine Dauci, cervisiis incocto, utantur quotidie. Quatenus odor seminis Dauci, odorem saxatilem domat & comprimit.” *Ibid.* c. 1. § 19. p. 6.

The red flowers in the middle of the umbella are commended for the epilepsy. Vid. *J. B.* and *R. H.*

The *Daucus Creticus* is in the *Mithridatium* & *Theriaca*; and *Daucus vulgaris* in the aqua petroselini composita. “Dauci Cretici semen acre, aromaticum.”

“ticum.” *R. H.* “Saporis calidi, aromatici; sicut & odoris. *Nucl. Belg.* 101.
 “Saporis acris aromatici; odoris debilis.” *Geoff.* iii. 397. “Dauci vulgaris
 “semen saporis subamari, acris; odoris aromatici.” *Nucl. Belg.* 101. “Sa-
 “poris Dauco Cretico debilioris, odoris fragrantis.”

E R U C A.

S E C T. I.

Eruca. offic. *Eruca latifolia alba fativa* Dioscoridis. *B. P.* 98. *T.* 227.
Eruca fativa. *Dod.* 708. *Ger.* 246. *Park.* par. 502. *Eruca major fativa* an-
 nua, flore albo striato. *J. B.* ii. 859. *H. Ox.* ii. 228. *R. H.* 806. *Eruca fativa*
 alba. *Park.* 816. *Sisymbrium foliis pinnatifidis, laciniis exterioribus majori-*
bus, caule hirsuto. *H. Cliff.* 337. Garden Rocket.—This has a small, some-
 what oval, and flattish seed, rather less than turnep seed, of a reddish-yellow, or
 dark-gray colour; the seminal plant of which is visible through the thin skin,
 or membrane, which covers it, with its radicle: of a hot, biting, bitterish
 taste; with a peculiar flavour, and foetid smell.

I know not where it grows wild. Sown in gardens it flowers in June, and
 sooner when it sows itself. I observed in Holland the druggists kept some-
 times sinapi album, sometimes semen erysimi, and sometimes sophiæ chirurgo-
 rum as I remember, for it. “Semen in siliquis oblongis, rapi ac napi simile.”
Dod. “Semina flava, majora quam sinapi, minus etiam rotunda.” *J. B. R. H.*
Geoff.

“*Eruca, quod vellicando linguam quasi erodat.*” *B. P.* *Ἐρζωμεν. Theoph.*
hist. l. i. c. 9. p. 11. & *Dioscor.* l. 2. c. 170. p. 146. “In condiendis ob-
 “soniis tanta est suavitas, ut Græci euzomon appellaverint.” *Plin.* l. 20. c. 13.
 p. 523: for *ζωμεν* is jus. “Odor hujus plantæ validus & ingratus, ne dicam
 “foetidus, nec minus sapor, quamvis Itali eo delectentur, & acetariis, gustus
 “gratia *Eruca* perpetuo admiscetur: forte tamen viribus potius quam sapore
 “se illis commendat initio, & postea usu frequenti, palato etiam se conciliat.”
R. H. 806. “Itali etiam nunc dierum acetariis *Erucae* tantillum admiscetur,
 “ejusque gustu mirifice delectantur.” *R. H.* *ibid.* *vid. Bod. in Theoph.* p. 748.

“Cruda *Eruca* coitum largiore cibo concitat: ac ipsius quoque semen ejus-
 “dem est effectus. Urinas movet, concoctionem juvat, alvoque est accom-
 “modata. Semine in condiendis obsoniis utuntur: quod uti diutius peren-
 “net, aceto lacteve subactum in pastillos digerunt, atque ita reponunt. Nas-
 “citur & sylvestris *Eruca* maxime in Iberia quæ occidentem spectat, ac ipsius
 “semine loci illius incolæ pro sinapi utuntur. Est porro quam fativa ad
 “movendam urinam efficacior & multo acrior.” *Dioscor.* l. c.

S E C T. II.

It is an acrid, antacid, detergent diuretic; called aphroditic, and uterine;
 and is commended inwardly for the scurvy, green-sickness, dropsy; and out-
 wardly as an errhine, apophlegmatism, & attractant.

“ Semen calfacit & siccatur intense 3. *Ufus præcip.* in venere stimulanda, apoplexia præservanda. Extrinsecus (imposita radix) extrahit officula fissa, pituitam e cerebro prolicit (in apophlegmatismis.)” *Schrod.* 586.

It is acrid, bitterish, strongly odoriferous, or rather fœtid; loses much by drying or decocting like the other acrida volatilia; though the seed keeps pretty well: it also inflames the skin. “ Saporis est acerrimi & subamari, odoris gravis & urinosi.” *Nucl. Belg.* 107. However much it may please an Italian palate, it is distasteful to every body here, and never used. “ Semen *Erucae* usurpatur in electuario de satyrio; & in tabellis magnanimitatis *Ph. Reg. Geoff.* iii. 440; who gives the analysis of the *Eruca* (sylvestris major lutea, caule aspero. *B. P. E.*) tenuifolia, perennis, flore luteo. *J. B.* ii. 861. *T.* 227. and makes it stronger than the sativa; “ odorem refert oleorum fœtidiorum super calcem vivam rectificatorum.——Saporis est acris, urentis, cum quadam amaritudine in recessu. *Erucae* sativæ odor & sapor remissiones sunt, sicut & virtus debilior.” *Geoff.* iii. 437. & 438. & *R. H.* 807. The dose is not determined. It is an ingredient in the aq. antiscorbutica of the *Paris Dispensatory*, p. 199.

H O R D E U M.

S E C T. I.

Hordeum. offic. *Hordeum distichon*, quod spica binos ordines habeat *Plinio. B. P.* 23. *T.* 513. *Hordeum distichum. B. Theat.* 440. *J. B.* ii. 429. *R. H.* 1243. *Syn.* 388. *Hordeum distichon. Dod.* 501. *Ger.* 70. *Park.* 1130. *H. Ox.* iii. 206. *Hordeum* flosculis lateralibus masculis muticis. *H. Cliff.* 24. Common Barley.

“ Crescendi locum natalem circa secale, hordeum, triticum, cerealia ista pro frumentis, non modo per totam Europam, sed fere per totum terrarum orbem, recepta, fateor me dare non posse, nec apud authores reperiri memorie ullibi proditum.” *H. Cliff.* 25. “ Cardanus refert in Atholia, Scythiæ regione, *Hordeum* absque femine produci: in Cappadocia vero sine cortice.” *J. B.* ii. 420. He has taken a grass for it.

Hordeum, q. horridum sc. aristis: or from φερσῆν alimentum, ἀφερσῶ nutrio, if it was called anciently fordeum, as some contend. vid. *R. H.* “ *Hordeum*, “ κριθή, ἀπὸ τῆς διακριθῆναι, quod eo reperto & in usum recepto, glandibus spretis, a brutis homines distincti sunt.” *B. P.* 22. vid. *Bod. in Theoph.* 932. This grain was very anciently famous for its use in food, drink, and medicine.

“ Antiquissimum in cibis hordeum, sicut Atheniensium ritu, Menandro autore apparet, gladiatorum cognomine, qui Hordearii vocabantur. *Plin.* l. 18. c. 7. “ Nonnullos dimovendo ex propria natura, putrefaciendoque leviter, succos ad bibendum idoneos cogunt: veluti qui vinum ex Hordeo, triticove conficiunt; aut quod zythus (ζυθος) in Ægypto appellatur.” *Theoph. de caus.* l. 6. c. 15. p. 368. “ ex Hordeo zythus (ζυθος) paratur, quod quidem urinas cit. . . Fit & ex Hordeo potus, quem curmi (κέρμι) vocant, eoque sæpenumero pro vino utuntur. Verum dolorem capitis infert, pravumque succum gignit, ac nervos lædit. Parantur & similia potus genera ex tritico quemadmodum in Iberia occidentali & Βρεττανία. *Dioscor.* l. 2. c. 109 and

110. p. 125. "Ex hisdem (frugibus) sunt & potus zythum in Ægypto, cælia & ceria in Hispania, cervisia & plura genera in Gallia, aliisque provinciis; quorum omnium spuma cutem fœminarum in facie nutrit." *Plin.* l. 22. c. 25. Galen, Ægineta, and Suidas mention zythum. "Diodorus scribit, Bacchum, ἐπεὶ το ἐν τῇ κρήνῃ κατασκευαζόμενον πῶμα, το καλόμενον ζυθον." *Dalec. in Plin.* p. 587. "Expertus ipse didici vix differre talem cervisiam a vino generosissimo; et miratus sum ab omni ævo, nobis cognito, id notissimum fuisse atque usurpatum;" *Boerb.* who adds from *Diodorus Siculus*, l. 1. "Osiris rex, si quæ tellus plantam vitis non aleret, docuit ex Hordeo potum vini fragrantia & jucunditate, non multo inferiorem;" *Herodotus* (in Euterpe), "Ζυθος ὄνος ἀπο κρήνης γινόμενος;" *Tacitus* (*de Mor. Germ.*) "Potus ex Hordeo aut frumento, in quandam similitudinem vini corruptus;" *Ætius*, "Βυνη Hordeum est madafact. donec germen emittit, deinde totum cum enatis ligulis." *Chem.* ii. p. 192.

S E C T. II.

It is an acescent and farinaceous grain, antiseptic, incrassating and nourishing; and commended in all acute, inflammatory, and putrid diseases. It is given in various forms; commonly decocted, or in decoction; and much used in food, but more in drink, especially when fermented into ale and beer, whence a spirit is distilled no ways inferior to the spirit of wine.

"Refrigerat & siccat 1. abstergit, aperit, digerit, emollit; est diureticum, nutritivum. N. crudum ventriculo aliquatenus inimicum est, quippe flatulentum: tamen coctione corrigitur. *Præp.* 1. Aqua Hordei graminis. Fit mense Maio, colligiturque mane gramen rore adhuc madidum. Insignis est efficaciam in æstu domando; extrinsecus in cephalalgia mitiganda, oculorum defluxionibus calidis emendandis, &c. 2. Decoctum Hordei, seu aqua decoctionis hordei. Sumitur hordeum non excorticatum si intentio sit abstergere, exicare: excorticatum si animus digerere, sitimque extinguere, &c." *Schrod.* 603.

That barley is a farinaceous grain, and as wholesome as any other, of which bread, the staff of life, is made, is generally allowed, and confirmed by daily experience. But that the liquors, prepared from it by fermentation, are to be compared with the generous blood of the grape, is what wine-bibbers will by no means allow. It is true *Dioscorides* says, "renes et nervos zythum tenet, meninges potissimum offendit, inflationem parit, vitiosumque creat, et elephantiasin inducit." He adds, "Ipso vero maceratum ebur obsequiosum, et operi tractabile redditur." If all be equally true, it needs no answer. Of curmi he says, "Dolorem capitis infert, pravumque succum gignit, ac nervos lædit." But has not wine the same effects? Is the elephantiasis more common in Britain than in wine countries? Or are the people less healthy and robust here than in France? And has not excess in wines as bad consequences as excess in malt liquors? Although the fully rectified spirit is the same, from whatever fermented liquor it is prepared; yet we find wines are commonly binding, and malt liquors laxative; while the latter is more nourishing than the former. The one therefore may be proper in some circumstances,

where the other is not: but, generally speaking, where beer and ale are prejudicial, the use of wine should not be allowed. To use a little wine for the stomach's sake, was certainly good advice of *St. Paul* to *Timothy*. And I have known small beer agree better with some stomachs than water, as well as porter and strong beer with others. Boerhaave's prescription of strong beer and old cheese to a valetudinary lady proved a cure, though laughed at by the ignorant.

"Analyſi chymica ex granorum hordei lbviß. prodierunt humorum lbij. 3xv. 3ß; olei 3iv. 3vß. Carbo pendeat lbj. 3xij. 3viiß; unde cinerum 3ij. 3vj. gr. xl. ac inde ſalis fixi alcali 3j. (ergo terræ 3j. 3vj. gr. xl.) & jactura fuit lbj. 3vj. 3iiß. (ſum lbvj. 3vij.) . . . Hordeum non eaſdem cum tritico facultates obtinet: ſiquidem triticum calefacit: Hordeum vero quocunque modo paratum ſit, nunquam corpus calefacit, ſed quodammodo refrigerat & abſtergit, & variè pro modo præparationis tum humectat, tum ſiccatur." Ita nugatur *Geoff.* iii. a p. 563. ad 588. vid. aqua hordeata *Ph. Lond.* p. 76. and *D. Pemberton's* remark on it. *Diſpenſ.* p. 252.

H Y O S C Y A M U S.

S E C T. I.

1. Hyoſcyamus, Hyoſoyamus niger. *off.* Hyoſcyamus vulgaris, vel niger. *B.B.* 169. *T.* 118. *H. Ox.* ii. 494. Hyoſcyamus niger. *Dod.* 450. *Ger.* 353. Hyoſcyamus vulgaris. *J. B.* iii. 627. *Park.* 362. *R. H.* 712.-1. *Syn.* 274. Hyoſcyamus foliis amplexicaulibus. *H. Cliff.* 56. Common or Black Henbane.—This has ſmall, roundiſh ſeeds, ſomewhat flattened, of an aſh-colour, ſub-viſcid, and diſagreeable though almoſt inſipid to the taſte, and, when green, of a faint ſmell.

2. Hyoſcyamus albus. *offic.* Hyoſcyamus albus major, vel tertius Dioſcoridis, & quartus Plinii. *B.P.* 169. *T.* 118. *H. Ox.* ii. 494. Hyoſcyamus albus. *Dod.* 451. *J. B.* iii. 627. *R. H.* 712. *Ger.* 353. *Park.* 262. Hyoſcyamus, foliis petiolatis, floribus ſeſſilibus. *H. Cliff.* 56. White Henbane.—The ſeeds of this every way reſembles the former, only are a little lighter in colour. Both are beautifully and regularly pitted, when viewed by a microſcope; and have no ſmell, when ripe and dried.

The black is very common with us, and grows by road ſides, and in fat and rubbiſhy places; the white in Languedoc, &c. This is commonly annual; but ſometimes will laſt two years: the black is always biennial. They flower in June and July. Authors generally allow the uſe of the ſeed of the white only, and condemn the black; but the white was never uſed here. "Ex Hyoſcyamis eligere monet Fernellius floribus albis, ſemineque albo, reliquis neglectis. *officin. nat.* ejus radix, ſemen, folia." *Schrod.* 603. "Uſu. Hyoſciamini offic. radix herba: Hyoſciamini albi offic. ſemina." *Dale* 181. & *Pharm. Lond.* edit. 1721. "Hyoſciamini albi ſemen, Hyoſciamini nigri folia." *Pharm. Edinb.* 1744. "Utriuſque ad uſum externum folia, flores, & ſemina adhibentur ad uſum internum vero ſemina tantum. Nonnulli nigrum majori virulentia præditum eſſe ſuſpicantur, quapropter illum prorsus rejiciunt, albi

“ albi tantum femina usurpantes. Sed ab omnibus fere tum Parisiensibus, tum Germanis & Anglis niger adhibetur.” *Geoff.* iii. 594. The flower of neither of them is white, nor is the seed: on their virulency, *i. e.* narcotic quality, depend all their virtues. Sed N. B. Dissentiunt authores de Hyoscyamo albo.

“ Hyoscyamus frutex est caules emittens crassos, folia lata, oblonga, divisa, nigra, hirsuta: secundum vero caulem, continua quasi serie, flores prodeunt, tanquam Punicorum cytini, scutulis septi feminum plenis, ceu papaveris. Tria porro sunt ejus genera. Unum flores profert pene purpureos, folia smilaci similia, semen nigrum, ac cytinis præduros & spinosos: alterum flores habet luteos, folia & siliquas molliores, tenerioresve, & semen subflavum, sicut erysimum. Ambo insaniam gignunt & soporem, ideoque vix in communem usum recipiuntur. Tertium genus, quod mitissimum est, adeoque ad medicinam utile, pingue, molle, lanuginosum, candidis floribus ac semine. In maritimis ruderibusque nascitur. Albo itaque utendum est: idque si desit flavum usurpari oportet. Nigrum enim ceu deterimum improbat.” *Dioscor.* l. 4. c. 69. p. 269.

“ Herculi eam quoque ascribunt, quæ Apollinaris, apud Arabas altercum sive altercangenon, apud Græcos vero hyoscyamus appellatur. Plura ejus genera: unum nigro semine, floribus pene purpureis, spinosum. Vulgare autem candidius est et fruticosius, altius papavere. Tertii semen irionis semini simile: et omnia insaniam gignentia, capitisque vertigines. Quartum genus molle, lanuginosum, pinguius cæteris, candidi seminis, in maritimis nascens, hoc recepere medici.” *Plin.* l. 25. c. 4.

“ Inter plurima *hyoscyami* nomina manserunt illa tria. 1. et usitatissimum est hoc Græcum, quod faba suilla Latinis est. Retinuerunt officinæ, sed corruptum in jusquiamum. Causam ejus appellationis credo quod passu ejus apri convulsionibus moriantur. 2. *Apollinaris*. Causam credo, quod qui sumperint, delirent instar poetarum. 3. *Altercum*. Plinius Arabicum esse vult. Non credit id Scribonius Largus, et deducit ab altercando, quod perpetuas altercationes moveant, qui sumperint.” *Hoffman*, p. 257. It is called also herba canicularis, et dens caballinus in Schroder; and “herba cunicularis, herba calicularis, faba Jovis, fabulum, mania *querundam*.” *Geoff.* iii. 593. The seed is ordered internally, and the root and leaves externally, by *Hippocrates*.

S E C T. II.

The seed, as well as the leaves and root, is anodyne and narcotic: it is commended in spitting of blood, and catarrhs; and gave name to an electuary, which was omitted in the last edition of our dispensatory. The leaves are sometimes used externally as anodyne, repellent, and discutient, and thus are an ingredient in the ung. populeon. Some make anodyne necklaces of the roots for childrens teething; others for the epilepsy.

“ Refrigerat 3. siccatur 1. mire somnum inducit, stupefacit, acrimoniam mitigat, rationem perturbat. Unde internus ejus usus rarissimus est, exhibetur tamen ad hæmoptysin curandam. Externus aliquatenus crebrior, scilicet in tumoribus calidis, in podagra, in odontalgia (suscipitur fumus feminis
“ per

“ per infundibulum). Tralliani amuletum antipodagricum ex radice, vid.
 “ l. xi. (p. 314.) *Præpar.* 1. Aqua ex fol. fl. ac semine immaturo destill.
 “ 2. Oleum expressum, ex semine. 3. Extractum, seu succus Hyoscyami.”
Schred. p. 604.

1. There is nothing very remarkable in the taste of the black henbane, but it has a strong disagreeable smell, something like that of garden clary, but more fetid. What we have here for the white (which is the same with the *H. albus*. *R. H.* “ Floribus minoribus, in nonnullis totis luteis, in aliis luteis, cum fundo obscure purpureo.”) has nothing of the scent of the black. “ Odore foetido facile se prodit Hyoscyamus niger. Radix minus olida quam folia.” *J. B. R. H.* 711. “ Gravis odoris ac ingrati tota stirps est, caput aggravans & somnolentiam inducens.” *Geoff.* iii. 593. “ The leaves are of a rank, strong, offensive smell.” *Mill. Bot.* 236. “ Gravissimè olet, radix est saporis subdulcis, fere instar cinaræ.” *Nucl. Belg.* 145. “ The leaves are insipid, and smell ill: they redden pretty much the blue paper; the root reddens it somewhat less, is sweetish, and has the taste of the artich oak. By a chymical analysis the leaves give some volatile salt and much oil.” *T. Hist.* p. 201. — 2. It is anodyne and hypnotic, outwardly applied. “ Unguentum de Hyoscyamo præstans anodynum comperimus.” *Wepfer. Cic.* p. 233. “ Apud nos ex semine Hyoscyami albi fit oleum, cujus ad parandum somnum miræ sunt vires temporibus illitum. Est etiam in usu in gonorrhœa & nimis mensibus, regioni lumborum & perinæo adhibitum. “ In doloribus aurium, cum croco aut castoreo, infunditur. In dentium doloribus cum lana imponitur.” *Hoffm.* p. 260. Yea it has been observed, that a clyster made of a decoction fol. Hyoscyami M. ss. with some carminatives in milk and turpentine, caused a furor and delirium, which last continued some hours; “ donec post aliquot horas novi clysmatis acrioris injectione, alvus “ a scybalis triduum jam retentis, una cum clystere antea injecto, liberata “ fuit: in quo quasi momento, non solum delirium cessavit, sed intra bihorium etiam duo calculi renales rejiciebantur.” *Ex Ephem. N. Curiosor.* de cur. 3. An. 9. & 10. p. 178. in appendice. *Geoff.* iii. 599. *Miller (Bot.* 237.) says, “ The roots are frequently hung about childrens necks, being cut to “ pieces, and strung like beads, to prevent fits, and cause an easy breeding “ of their teeth.” — 3. Inwardly taken its narcotic virulency is sufficiently attested, and the symptoms it causes very various and surprising. “ Recentia “ folia illita, ad mitigandos omne genus dolores, apprime sunt idonea. . . . “ Cocta vero olerum instar, & tryblii mensura esitata, mediocrem mentis alienationem faciunt. Aiunt & idem efficere, si cui in colo ulcus sentienti infundantur.” *Dioscor.* l. 4. c. 69. p. 270. “ Hyoscyamus in potu cibove sumptus, qualem ebriorum mentis alienationem infert.” *Diesc. Alexiph.* c. 15. p. 407. “ Altercum (quod Græci *υοσκυαμον* vocant) qui biberunt, caput grave venisque distentum habent, mente abalienantur, cum quadam verborum altercatione (inde enim hoc nomen herba trahit altercum) postea sopiuntur, & omni sensu carent, viviscentibus membris eorum.” *Scrib. Larg.* c. 49. col. 224. That the seed caused mentis alienationem was not unknown to *Hippocrates*. vid. *de Morb. Mul.* l. 1. *Ed. Fæf.* p. 629. l. 18. There is in *Wepfer. de Cicut.* p. 230. an account of some very extraordinary effects the roots Hyoscyami nigri had on the people of a monastery, who had eaten them boiled,

ed, and dressed with oil, vinegar, and salt, in place of, and together with, cichory roots by a mistake. "Post hujusmodi collationem suo tempore cubitum itum. Hic enimvero oriri symptomata coepunt, et vesicæ radi- cum paulatim diffundi toxicum; sentiri a quibusdam capitis vertigo, aliquotum torrerî linguæ ac labia, asperari fauces, torqueri nonnullorum ilia, ac totis artubus male haberi. Fuit qui gargarismo palati ardorem compescere studuit, sed lingua, velut in frixoria tosta, omnem respuit medelam. Insonante noctis duodecima, cum ad preces matutinas excitarentur, miserabilem aliquorum metamorphosin spectare fuit. Unus ut pro vitâ desperata habitus, sacramentis provideri debuerit: alius quasi dentibus nuces frangeret, et exemptos nucleos fringillis domesticis projiceret: alius ilia sibi rumpenda clamitabat. Ex iis qui ad chorum venerant," some could not read, others read what was not in the book, others saw the letters running like pismires before them. "Lepidum præterea fuit, mane magistrum sartorem videre laboraturientem, qui ne filum quidem armare acu, nec a tyrone armato, tangere rem acu, ut sibi videbatur, jam tricuspide, valens, quovis punctu, aut digitos, aut poplitem cruentavit." &c. vid. *Wepser*. l. c. & *Geoff.* iii. 596. ad 602. where are yet much greater wonders quoted from the German Ephem. which, however are scarce credible; as that the vapour of the boiled herb, or smoak of the burning seed, turns people furious, and sets them a fighting; or the effluvia of the seeds wrapt up in paper in a stove ("in superiori texttrini in hypocausto constituti partæ") should set a man and his wife, otherwise good friends, by the ears. Sure I am that I have kept several ounces of the seed, husks and all, some years by me; and, to try the effects of the fumes, have burnt a great deal of it without finding the least disorder, or uneasiness of any kind, more than if it had been common chaff. "Semen Hyoscyami prunis impositum, fumum emittit teterrimi odoris, quo naribus vel ore per infundibulum excepto, empirici expellunt vermiculos, qui aliquando in naso aut dentibus nascuntur, eosque in subjecta pelvi aqua repleta excipiunt, ut melius oculis percipiantur." *R. H.*

"Analysi chymica ex foliorum & summitatum floridarum Hyoscyami nigri lbv. prodierunt humorum lbv. 3v. 3vj. gr. lxxvj; salis vol. urinosi 3j. gr. xij; olei 3j. 5viiiß. Carbonis fuere 3v. 3ivß; unde cinerum 3ij. 3iibß, ac inde salis fixi mere alcali 3j. 3iibß. (ergo terræ 3ix.) & jactura fuit 3ij. 3iij. gr. lxxvj." "Ex seminum recentium lbv. prodierunt humorum lbj. 3vij. 3ij; olei lbj. 3v. 3j. gr. liv. Carbonis fuere lbj. 3ix. 3ij; unde cinerum 3v. 3vij, ac inde salis fixi salis cum substantia terrea talcosa permixti gr. xxxvj; (ergo terræ 3v. 3viß.) & jactura fuit 3ix. 3j. gr. xvij." (sum lbv. - 3j.) "Folia saporem fatuum referunt: manibus confricata odorem virosi exhalant. Eorum succus chartam cæruleam rubram efficit. Radices subdulces sunt & cinaræ sapore donantur. Planta sale essentiali obtinere videtur ammoniacalem, cum multo crasso oleo viroso consociatum. Ejus semina saporis sunt aliquantisper glutinosi, odoris narcotici & ingrati. Oleum continet tum tenue, tum crassum virosum & valde narcoticum, summæ rarefactionis aut expansionis capax, cum sale ammoniacali conjunctum." vid. *Geoff.* iii. 594. et *T.* l. cit. *Sed nihil explicant.*

The dose is uncertain. "Semen laudatur in hæmoptisi a ʒß. ad ʒj." *Geoff.* iii. 602.

L I N U M.

S E C T. I.

Linum, Linum sativum. *off.* Linum sativum. *B. P.* 214. *T.* 339. *Dod.* 533. *Ger.* 556. *Park.* 1335. *R. H.* 1072. Linum. *J. B.* iii. 450. *R. Syn.* 362. Linum latifolium annuum, cæruleum, sativum. *H. Ox.* ii. 572. Linum, ramis foliisque alternis, lineari-lanceolatis; radice annua. *H. Cliff.* 114. Common or manured Flax, or Line.

“ Linum sylvestre, sativum plane referens. *J. B.* iii. 452. Linum arvense. *B. P.* 214. (*T.* 339.) Common wild Flax.—“ Nescio an aliter a sativo differat, quam ut sylvestre a culto inter segetes frequens.” *R. Syn.* 362. “ Videtur a facie Africanæ originis, et forte a seminibus satis; tandem mansuevit.” *H. Cliff.* 114.—The seed of this plant, which is the only part used medicinally, is very well known and esteemed by every body. *vid. Plin.* l. 19. *proem.* et c. 1. *Bod. in Theoph.* p. 943. *J. B.* iii. p. 451.

S E C T. II.

It is antacid, incrassating, anodyne, and relaxes the fibres, or weakens their tone; called pectoral; and commended internally in coughs, consumptions, pleurisies, heat of urine, nephritic pains, &c. and externally in fomentations, cataplasms, clysters, for pains, tumors, hæmorrhoids, &c.

“ Semen calfacit 1. in reliquis temperatum est, digerit, emolliit, maturat. *Ufus præcip.* in tussi, pleurisi, phthisi. Extrinsecus maturat tumores, lenit dolores, foetum expellit. *Præp.* 1. Mucilago. Fit coctione vel infusione in aqua. 2. Farina. 3. Oleum expressum. Easdem vires retinet quas semen. Prodest etiam ad pterygia oculorum (infiltratum) in primis cum successu exhibetur pleuriticis, atque dolore colico vexatis, in quibus & intrinsecus prodest, ut et in liene duro. Dosis ad ʒij.” *Schrod.* 617.

1. It is of a soft and somewhat disagreeably sweetish taste, and little smell; though the oil smells strongly. It is not acrid, but yields plenty of mucilage to water; and of oil by expression, which thickens by boiling, and dries in the air into an almost indissoluble crust. “ Linum vulgo notum est, cujus semen easdem quas foenum græcum vires habet: quippe quod discutiat et emolliat omnem intus forisque inflammationem, &c.” *Dioscor.* l. 2. c. 125. p. 129. — 2. The water in which flax is steeped is reckoned of a poisonous nature: and there is an act of parliament in James VI.’s time against laying green line in lochs or burns. — 3. Linseed used in food affords but bad nourishment, or rather spoils the stomach, and breeds obstructions in the viscera. “ Lini semen esum flatuosum est etiamsi frigatur: adeo sane recrementitia humiditate plenum est.” *Galen Simpl.* l. 7. p. 54. F. “ Quidam Galeni tempore utebantur semine Lini tolto pro obsonio cum garo, item melle admixto. Sed flatuosum est, inquit, stomacho incommodum et ægre concoquitur. Quod paucis abhinc annis Middleburgi in Zelandia (inquit Tragus) animadverti potuit, cum propter frumenti aliarumque frugum inopiam, plerique ex civi-

“ bus

“bus pane & cibus ex hoc coctis vescerentur. Distenta enim his valde cito
 “hypochondria fuerunt, & facies aliæque partes tumidæ factæ, quorum non
 “pauci sic affectæ etiam mortui sunt.” *R.H.* 1073. vid. etiam *Galen de Alim.*
 “fac. l. 1. c. 32. p. 15. E. “Lini semen comestum alvum sistit, habet &
 “nonnihil refrigerans.” *Hippoc. de Dieta*, l. 2. p. 356. l. 48. “Lini semen
 “etiam tussientibus pueris in cibo exhibent, cum ovi vitello affato & sesamo
 “torrefacto.” *Hip. de morb. mul.* l. 1. p. 603. l. 39. Hence it is hurtful ubi
 fibræ laxæ & debiles, & humores pituitosi. *An & narcotica naturæ?* Pro-
 babiliter. *Certissime debilitat.*

“Analyfi chymica ex seminum Lini lbj. prodierunt humorum lbj. 3vj. 3ij;
 “olei lbj. 3v. 3iiis. Carbonis fuerunt lbj. 3iij. 3iis; unde cinerum 3iv. 3viis.
 “& inde salis fixi falsi talcosi 3j. (ergo terræ 3iv. 3viis.): ac jactura fuit 3xvij.
 “salem obtinet essentialem vitriolico-ammoniacalem.” *Geoff.* iii. 736.

The recently expressed oil is given to 3ij. 3iij. or more, in the pleurisy,
 iliac passion, &c. and the seed, by way of tea (3ij. pro aquæ lbj.) is now
 much used. The seed is an ingredient in the oleum mucaginum, cataplasma
 suppurans: and the oil is used in the unguentum sambucinum.

“Oleum Lini cum C. V. destillatum mire medetur paralyti.” *Herm. Cyn.* 428.
 “Observandum est ut oleum Lini recens sit, & dulcis saporis. Si recens ob-
 “tineri nequeat, ejus rancor & sapor ingratus tollitur, illud cum aqua tepida
 “in ampulla vitrea diu conquassando, & aquam identidem mutando, donec
 “nullus sapor & odor ingratus supersit.” *Geoff.* iii. p. 739.

L I T H O S P E R M U M.

S E C T. I.

Lithospermum, Miliun solis. *offic.* Lithospermum majus erectum. *B. P.*
 258. *T.* 137. Lithospermum minus. *Dod.* 83. *Ger.* 609. Lithospermum
 vulgare minus. *Park.* 432. Lithospermum sive Miliun solis. *J. B.* iii. 590.
R. H. 503. *Syn.* 228. Lithospermum erectum vulgare majus, flore ochroleuco.
H. Ox. iii. 446. Lithospermum seminibus lævibus, corollis vix calycem super-
 antibus. *H. Cliff.* 46. Gromwell, or rather Gromill or Graymill—This has a
 roundish, shining, white seed, containing, within an hard insipid shell, a fari-
 naceous sweetish kernel.

“Lithospermum, quod nonnulli *λίγωνυκον*, alii *ἑξωνυχον*, alii *ἡρακλειαν* vo-
 “cant, propter seminis duritiem; a qua & Lithospermi nomen accepit. Fo-
 “liis est oleæ, longioribus tamen, latioribus atque mollioribus, & iis quidem
 “quæ in imo a terra exiliunt, humi jacentibus; ramulis rectis, tenuibus,
 “acuti junci crassitudine, firmis, lignosis; in quorum cacumine bifida propago
 “cauliculorum speciem exhibet, foliis longis; inter quæ semen lapidea duritie,
 “rotundum, candicans, ervi parvi magnitudine. Nascitur in asperis & editis
 “locis. Vim habet semen, cum vino albo potum, calculos frangendi, urinas-
 “que pellendi.” *Dioscor.* l. 3. c. 158. totum. p. 237.

“Inter omnes herbas Lithospermo nihil est mirabilius. Aliqui *Ægōnychon*
 “vocant; alii *Diospyron*, alii *Heracleos*. Herba quincuncialis fere, foliis
 “duplo majoribus quam rutæ, ramulis furculosis, crassitudine junci. Gerit
 Vol. II. A a a “juxta

“ juxta folia singulas veluti barbulas, & earum in cacuminibus, lapillos, candore & rotunditate margaritarum, magnitudine ciceris, duritie vero lapidea. Ipſi, quâ pediculis adhærent, cavernulas habent, & intus ſemen. Naſcitur & in Italia, ſed laudatiſſimum in Creta. Nec quicquam inter herbas majore quidem miraculo aſpexi. Tantus eſt decor, velut aurificum arte alternis inter folia candicantibus margaritis: tam exquiſita difficultas lapidis ex herba naſcentis. Jacere atque humi ſerpere authores tradunt. Ego vulſam, non hærentem vidi. Iis lapillis drachmæ pondere potis in vino albo, calculos frangi, pellicule conſtat, & ſtranguriam diſcuti.” *Plin.* l. 27. c. 11. p. 677. vid. *Bod. in Theoph.* p. 1127. The lachryma Jobi is the *Lithospermum arundinaceum* fortè *Dioſcoridis* & *Plinii*. *B. P.* 258.

It grows in dry fields, thickets, &c. in England, flowering in May and June. *Milium*, ſoler *Mauritanis*, quod in montibus ſoler frequenter naſcatur: hinc vulgo milium ſolis inepte dicitur. *B. P.*

S E C T. II.

It is antacid, and, when uſed in emulſion, diluent, diuretic; called lithontriptic; and commended in the ſtone, gravel, ſtoppage of urine, gonorrhœa, &c.

“ *Officin.* Semen, raro folia. Calfacit & ſiccatur. 2. calculum inſigniter comminuit, ac expellit, renes abſtergit, urinas ciet, partum pellit. Doſis ſem. ʒj. ad ʒij. N. Sunt qui pro certo experimento jaſtitant, in febre quotidiana ante invaſionem ſemen exhibere, idque vicibus iteratis. *Præp.* aqua ſtillat. e foliis.” *Schrod.* 627.

There is no acrimony in the kernel; and the ſtoney ſhell is indigeſtible. “ Folia ſunt ſapore vix alio quam herbaceo.” *J. B.* “ Semen nec acre eſt, nec amarum, nec ullius alterius qualitatibus particeps, quæ calorem indicet.” *R. H.* “ Semina oleoſa, ſaporis dulcis, lactei.” *Nucl. Belg.* 197. “ The plant ſcarce reddens the blue paper: it is aſtringent and glutinous: the fruit reddens it a little: all that is drawn, by a chymical analyſis, from the grains, is alkaline; they yield ſome volatile ſalt, and much oil and earth.” *T. Hiſt.* p. 284. But according to *Quincy* they are of a pungent acrid taſte, and powerful diuretics, forcing by the urinary paſſages very much; “ and therefore are conveniently made into an emulſion with barley-water, or ſuch ſoftening liquor; becauſe that guards the tender parts againſt their pungency, which otherwiſe might be too ſenſible.” *Pbarm.* p. 147. “ Eſt diureticum ut oculi cancri, ut vitrum, & alia terrea, &c.” *Hoffman*, p. 318. vid. *Lap. Judaicus* ſupra, p. 275. Some make the ſhells abſorbents. “ The ſhells ſem. milii ſolis, not only with aqua fortis, but ſome other acids, make a greater and quicker bullition and efferveſcence than any other vegetable body that I have tried in its natural ſtate.” *Grew on Mixt.* And hence *Herman* (*Cynof.* p. 322.) ſays, “ Horum ſubſtantia in omnibus fere cum oculis cancrorum convenit.” But—2. I infuſed ſome of theſe ſeeds in ſpir. aceti; alſo in ſpir. vitrioli; and in neither could I obſerve any thing like bullition, efferveſcence, or ſolution. How then can they be abſorbent? However—3. In emulſion they are very ſafe, even in the ſtone, and may do ſervice in heat of urine, and

and other nephritic symptoms: there being no danger in the dose, *notante Ratio.*

“Analyſi chymica ex ſeminis milii ſolis lbv. prodierunt humorum lbj. 3j. 3ij. gr. lx; ſalis vol. urinoſi 3ijß; olei 3vij. 3v. Carbo pendebat lbj. 3xivß: qui per 16 horas calcinatus, reliquit cinerum nigrorum, ſaporis expertium lbj. 3ijj. 3ß: ex quibus lixivio terræ ruſcentis levis aliquantiſper ſalfæ gr. lxij. extracta ſunt. Jaçtura fuit 3vij. 3j. gr. xlviij. (ergo terræ lbj. 3ij. 3vij. gr. xlvj.) ſemina hæc ſapore donantur farinaceo, glutinoſo nonnihil aſtringente; ſalem obtinent eſſentialem ammoniacalem, cum oleo copioſo & uberrima terra aſtringente conjunctum. . . Renes a mucilagine viſcidâ, calculorum forrice & nutrice optime abſtergunt, has partes ab acrimonia urinæ optime defendunt, ſi pulverata ad 3j. propinentur in vehiculo idoneo.—Lithontripticum nondum novimus. Equidem pituitam & craſſos humores, arenulas aut calculos glutinantes diſſolvi & pelli poſſe medicamentis idoneis, vel etiam his ſeminibus concedimus.” *Geoff.* iii. 743. Are not here ſome inconſiſtencies? Vid. *R. H.* 503.

M I L I U M.

S E C T. I.

Milium. offic. Milium ſemine luteo, vel albo. *B. P.* 26. *Theat.* 502. *T.* 514. *H. Ox.* iii. 196. *Milium.* *J. B.* ii. 446. *Dod.* 506. *R. H.* 1251. *Ger.* 80. *Milium vulgare album.* *Park.* 1136. *Panicum*, panicula laxa, flaccida, foliorum vaginis pubeſcentibus. *H. Cliff.* 27. *Mill or Millet.*—This is a ſmall roundiſh grain, covered with a ſmooth yellowiſh huſk, of a farinaceous taſte.

It is ſowed in Italy, &c. in the fields with other corn. Our climate is too cold for it. The black is ſomewhat hardier than the white. It is the *κεγχρος*. *Theoph. hiſt.* l. 8. c. 3. p. 155. *Dioſcoridis*, l. 2. c. 119. p. 127. vid. *Rod. in Theoph.* p. 928. “Veteres non deſcribunt Milium peculiariter; ſed ex iis quæ ex Theophrasto & Plinio congeſſit Cæſalpinus hiſt. 51. facile eſt judicatu, quod habemus verum eſſe Milium. Utimur albo ſolo. Nigrum pro vitioſo habetur.” *Hoffman* 345. vid. *Plin.* l. 18. c. 7.

S E C T. II.

It is nourishing, like other grain, and aceſcent; called aſtringent, and (in decoction) ſudorific and diuretic; and commended internally for fluxes, &c. and outwardly as diſcutient and anodyne. But it is little uſed in medicine.

“Refrigerat & ſiccatur 3. alvum conſtipat, eſt difficilis digeſtionis, plurimi tamen ac laudabilis nutrimenti. Decoctum ſudorem & urinam potenter movet. Extrinſecus exiccat, catarrhos, dolores capitis & ventris ſedat, (toſtum cum ſale com calide vertici vel ventri impoſitum), conſumit lac, pellit calculum renum (in baln.) diarrhœam infantum ſiſtit (cataplaſm) cum decocto ſumach. *Præp.* 1. Aqua ſtillat. ex herba floreſcente. Inſigne præſervativum cenſetur in calculo. 2. Decoctum D. Ambroſii.” *Schrod.* p. 627.

It is a farinaceous grain, and, when well dressed, very palatable. It is said to be binding, and at the same time to have little viscosity in it: which, if true, seem to point out its being not only very nourishing, but also light and wholesome food. “Miliū frugibus cæteris (ἀρρο φάρερα) minus alit: in panes vero coactum, aut pultis instar præparatum, alvum sistit & urinam cit. Tostum vero & in sacculos inditum, fotu torminibus aliisque doloribus est auxilio.” *Dioscor.* l. 2. c. 119. p. 127. “Si Miliū debito modo (docet illum Varro l. rei rust. 57.) condatur, durare potest ultra 100 annos, cum triticum 50 tantum. . . . Licet pasta miliacea lenta appareat, quando cum multo liquore teritur, ut Galen l. alim. 12. ait: subito tamen atque absumptus est liquor, massa, & præcipue panis, fit friabilis, ut experientia docemur. Hinc Galen de Simpl. l. 7. (p. 50.) scribit, ob friabilitatem vix usurpari posse in cataplasmatis.” *Hoffman*, p. 346. § 3. “Milii panis dum recens est, & arte quadam pistoria recte paratus, ut Veronæ fit, & ita calidus ut ex forno excipitur devoratus, sua quadam dulcedine placet, & a pluribus expetitur. Quare non desunt qui ipsum calidum per plateas circumferant clamantes, Pandi Miglio, caldo, caldo: at cum obduruit ingratus sane est. Sylvani, qui carbones & arbores secant in Tridentino agro, sola pulve miliacea, quam vulgo appellant Polenta, se alunt, eam cum lacte edentes; nec alio dicunt se posse alimento perdurare: quare anno toto hoc tantum alimento vivunt, & fontanam aquam potant.” *Matth.* p. 328. It is commended in decoction, in intermitting and malignant fevers, small-pox, measles, dropsy, &c.

N I G E L L A.

S E C T. I.

Nigella, Melanthium, Gith. *offic.* Nigella flore minore simplici candido. *B. P.* 145. *T.* 258. *R. H.* 1071. *H. Ox.* iii. 515. Nigella Romana sive fativa. *Park.* 1375. Melanthium. *Dod.* 303. *Ger.* 1084. M. fativum, simplici flore. *Clus. H.* ii. 207. M. calyce & flore minore, semine nigro & luteo. *J. B.* iii. 208. Garden Nigella, or Fennel-flower.

This is commonly made the officinal species: but the *Nigella arvensis cornuta* (an *Melanthium* & *Gith Dioscoridis*. *B. P.* 145?) is preferred by some. It grows among the corn in Germany, France, Italy. In our gardens it flowers in July. The seed is small, black, wrinkled, and angular; of an oily, sweetish taste, and soft aromatic smell.

“Melanthium frutex est exiguus, furculis tenuibus in binorum dodrantum altitudinem, aut etiam amplius assurgens, foliis veluti senecionis, at multo tenuioribus, capitulo in cacumine parvo ceu papaveris oblongo, intrinsecus dissepimentis quibusdam prædito: intra quæ semen latet nigrum, acre et odoratum, quod panibus inspergitur.” *Diosc.* l. 3. c. 93. p. 211. “Gith ex Græcis, alii Melanthion, alii Melaspermon vocant. Optimum quam ex-citatissimi odoris, et quam nigerrimum.” *Plin.* l. 20. c. 17. vid. *Bod. in Theophr.* p. 832.

S E C T. II.

It is called pectoral, stomachic, carminative, alexipharmic, and uterine; and is commended for phlegmatic stuffings of the lungs, obstructions of urine or the menses, agues, poisonous bites, &c. But I cannot find that it is good for any thing.

“Calfacit & siccatur in prin. gr. 3. attenuat, aperit. *Ufus præcip.* in mucilage pulmonum resolvenda & expectoranda, lacte augendo, urina ac menses ciendis, moribus venenatis corrigendis. Specificæ in febribus quartanis & quotidianis. Extrinsecus crebri usus est in cephalalgia sedanda, catarrhis exiccandis (sternutando, suffiundo) in cucuphis, epithemat. &c. applicatum. Radix sistit, proprietate sua, hæmorrhagiam, si dentibus masti- cetur, naribusque imponatur. *Præp.* 1. Semen præparatum. Maceratur in aceto & exiccatur. 2. Aqua stillat. ex semine. 3. Oleum stillat. ex semine.” *Schrod.* p. 636. Stimulans aromaticum est in *Boerb. Lib. de M. M.*

1. It contains an aromatic oil. “Semina sunt odoris aromatici, saporis calidi, & grati aromatici.” *Nucl. Belg.* 207. “Saporis subacris, nonnihil oleosi.” *Dale*, p. 237. “Very sharp, sweet, strong smelling seed.” *Park.* “Semen odoratum.” *J. B. & Clus.* so that it is probably carminative and diuretic, &c. But if it is the *Melanthium* & *Gith antiquorum*, possibly it may be somewhat narcotic or virulent. “Incensum serpentes fugat. Sed & ipsum tradunt largius epotum enecare.” *Dioscor.* l. c. “Colligitur succus ejus ut *Hyoscyami*, similiterque largior venenum est, quod miremur; cum semen gratissime panes etiam condiat.” *Plin.* l. 20. c. 17. “Intro non tuto immittitur.” *Fernel.* p. 263. — 2. *Dioscorides* commends it for obstructed urine and catamenia, difficult breathing, and bites of spiders, drachmæ pondere bibitum. And outwardly for head-achs, tooth-achs, corns, leprosy, worms, &c. “Tritum vero linteolo illigatum & olfactum, says he, destillatione laborantes (*καταρροισμενους*) adjuvat.” And thus *S. Pauli* used it. *Q. B.* p. 391. It was an ingredient in the *Syr. Artemisiæ Matthæi de gradibus*. (vid. *Ph. Aug. Zwelf.* p. 18.) among forty others: but was thrown out of it in the *Ph. Lond.* long ago. “As for this syrup, there is hardly ever a dispensatory in the world, which has in it such an incoherent, confused medley: it is often asked for, but good for nothing.” *Quincy Ph.* 371. It has forty-two ingredients in it. The *Nigella* is now justly excluded the *London M. M.*

P E R S I C A.

S E C T. I.

Perfica, *Perfica malus. offic.* *Perfica molli carne & vulgaris, viridis & alba.* *B. P.* 440. *T.* 624. *Perfica. Cæs.* 49. *Perfica malus. Lob.* 568. *Perfica alba. Ger.* 1447. *Malus Perfica. Dod.* 796. *Park.* 1513. *J. B.* i. 157. *R. H.* 1515. *Mala Perfica. Park.* par. 580. *Amygdalus, foliorum serraturis omnibus acutis. H. Cliff.* 186. The Common Peach-tree.

It

It grows wild in Persia, America, &c. In gardens it flowers in March, and the fruit is ripe in September. "*Officin. nat.* Folia, flores, nuclei, fructus sed raro, quippe hi facile putrescunt." *Schrod.* 644. "*Usu.* Folia, fructus, & præcipue flores." *Dale* 301. "Fructus." *Ph. Lond.* 1721: though that has a "syrupus e floribus malorum Persicorum," p. 66. "The flowers are only used in physic." *Miller's Bot.* p. 339. "Flores, fructus." *Ph. Edinb.* 1744. "Nuclei Persicorum." *Herm. Cynof.* p. 381. which only are kept in the shops; and that very seldom.

It is controverted whether the *περσικα*. *Theoph. hist.* l. 3. c. 5. or *περσεα*, l. 4. c. 2. be the same with the Persica? vid. *Bod. in Theoph.* p. 125. *Dioscorides* has *περσικον μηλον*. l. 1. c. 164. & *πηρσεα δ'ενδρον*, l. 1. c. 187. "Hanc arborem, says he, prodidere nonnulli, in Perside quidem exitiosam esse; translatam vero in Ægyptum, natura mutata, in cibos receptam." *Rauwolfius* commemorat Persas, etiam hodierna die, Perseam a Persica arbore distinguere." *B. P.* 439. and 441.

S E C T. II.

The nuclei or kernels agree in virtues with the nuclei cerasorum; and may be used in the same way. The flowers are purgative. The syrupus ex floribus Persicæ was little used, and therefore left out of *our* Pharm. edit. 1744.

"Fructus refrigerant & humectant 2. Nutrimenti sunt pauci, facileque putrescunt. Verum initio pastus laxant alvum; exiccata constipant, laudanturque in fluxu alvi, &c. Flores, folia, ac nuclei, calfaciunt et siccant, abstergunt. *Usus præcip.* (Florum) in lumbricis infantum, in alvi laxatione, mesenterii obstructione, feri purgatione, et sim: (nucleorum) in diureticis et lithontripticis, in obstructione epatis, ardore stomachi. Extrinsecus adhibentur crebrò in emulsionibus dolori capitis dicatis, &c. *Præp.* 1. Conditum fructus. 2. Aqua ex floribus. 3. Aqua diuretica, ex nucleis. 4. Syrupus de floribus. Vermes necat. Dosis ad ʒij. 5. Conserva florum. 6. Oleum. Fit expressione." *Schrod.* 644.

1. Not only the nuclei taste like the nuclei cerasorum, though more agreeable; but the flowers and leaves have something of the same flavour with that of the laurel leaves, bitter almonds, &c. only not so pleasant. "Folia sapore amaro, qualis in nucleis, ingratiore tamen." *J. B. R. H.* "Folia, sapore amaro qualis in nucleis, ingratiore tamen, & aroma utcunque redolentia." *Geoff.* iii. 799. "Nucleus amaricans, non tamen gustu insuavi." *J. B.* "Folia mali Persicæ gustu amara sunt, nonnihil austera, et nucleorum Persicorum odorem referentia, dum digitis conteruntur. Flores amarorem quendam aromaticum non ingratum obtinent." *Geoff.* iii. 801. so that they might be suspected of virulency, as well as bitter almonds, and laurel leaves; were not—2. Both flowers and leaves purgative: for the cathartic stimulus may easily overcome their narcotic quality, if any such they have.

"Persica mala stomacho utilia sunt, et alvum quoque bonam præstant, si matura fuerint. Imatura vero eandem cohibent, sed siccata vehementius." *Diosc.* l. c. "Nunc autem discas quod Malorum Persicorum succus, et veluti caro facile corrumpitur, pravaque omnino est." *Galen de alim. fac.*

l. 2. c. 19. fol. 19. D. "Addit Paulus eos qui crebrius iis ad satietatem vescuntur febre corripi; læden. & nervos proprietate quadam." *R.H.* 1517.

"Analyſi chymica ex Mali Perficæ ſorum recentium lbv. prodierunt humorum lbiv. 3v. 3iij. gr. xv. (quorum plus lbiiiß. erant odoris & ſaporis amari, nucleos contuſos referentis, & obſcure acid.); ſalis vol. urinoſi 3j. gr. iij; olei 3ij. 3vij. gr. xiv. Maſſa relictæ pendebat 3iv. 3vj. gr. i, unde cinerum 3j. gr. lxxix, ac inde ſalis fixi alcali 3iij. gr. ix. (ergo terræ 3v. gr. lx.) Jactura fuit 3ij. 3vi. gr. xxxix." *Geoff.* iii. 801. Who gives them a ſal eſſentialis tartareo-ammoniocalis. There you have alſo the analyſis foliorum; and of the pulp of the fruit: beſides four or five pages of learned, or of wretched ſtuff, except what is ſtolen from *R.H.*

"Minora, quæ Armeniaca (Ρωμαϊστί δε πρακονια) Latine vero præcoquæ dicuntur, ſtomacho quam antediſta utiliora ſunt." *Dioſc.* l. 1. c. 165. totum. p. 80.

P I N U S.

S E C T. I.

Pinus. offic. *Pinus ſativa. B.P.* 491. *T.* 485. *R.H.* 1398. *Pinus. Dod.* 859. *Pinus officulis duris, foliis longis. J.B.* i. 248. *Pinus ſativa ſive domeſtica. Ger.* 1355. *Pinus urbana ſive domeſtica. Park.* 1534. *Pinus foliis geminis, primordialibus ſolitariis, ciliatis. H. Cliff.* 450. The Pine-tree.

It grows in the ſouth of France, Italy, &c. yet endures our ſevereſt winters. The nuclei, or kernels of the ſeeds, only are uſed.

"*Officin.* Nuces Pineæ, Cortex, & Folia." *Schrod.* 649. "*Uſu.* Coni, nuclei, eorumque cortices, & reſina ſtrobilina, quæ circa conos ſeu ſtrobilos concreta reperitur." *Dale* 277. "Folia, nuclei, reſina. *Pb. Lond.* 1721. "Nuclei, reſina." *Pb. Edinb.* "Pinus, the Pine-tree; its fruit, and reſin." *Lewis's Pharm.* p. 52. "The nuclei, or kernels are chiefly uſed." *Miller's Bot.* 346.

Theſe ſeeds are roundiſh oblong nuts, containing, in a brown hard ſhell, a white kernel, of a pleaſant ſweet oily taſte.

The Pine-tree is probably the *πευκη Theophrasti hiſt.* l. 3. c. 10. p. 158. Although Pliny, l. 29. c. 4. ſays, "Eadem in pityocampis picea naſcentibus; yet, l. 23. c. 2. he ſays alſo, "Pinorum erucas pityocampas vocant." Some think alſo that it is the *πιτυς* Galeni. vid. *R.H.* 1398. "Pinus (*πιτυς*) vulgo nota arbor eſt. Ejusdem vero generis eſt quæ picea (*πευκη*) dicitur, ſpecie tantum differens. Utriusque cortex ſtypticus, &c. Pityidum nomine *Πιτύν* (*πιτυων*) et Pinorum (*και της πευκης*) fructus appellantur, &c." *Dioſcorid.* l. 1. c. 86. and 87.

S E C T. II.

They agree in virtues with piſtacios and ſweet almonds, and are uſed the ſame way; are nourishing and antacid; called pectoral; and commended in coughs, conſumptions, heat of urine, &c.

“ Nuces pineæ (Strobili Conicoccali et Conaria veteribus) caliditate tempe-
 “ rata sunt et humidæ; maturant, leniunt, agglutinant, resolvunt, impin-
 “ guant; adeoque nucleorum usus præcipuus est in phthisi (quia nutriunt bene)
 “ tussi, stranguria, ac acrimonia urinæ mitiganda: segnem excitant Venerem,
 “ ulcera renum mundificant, &c. Cortices et folia refrigerant et siccant,
 “ astringunt. *Usus præcip.* externi in dysenteria, fluore mensium (suffiendo)
 “ *Præp.* Oleum exprimitur è nucleis. 2. Confectio nucleorum.” *Schrod.*
 p. 649.

The kernels are oily, and reckoned more delicious than sweet almonds, being but little inferior to the pistachios. The tree yields a turpentine. The leaves and young shoots of any Pine, Fir, and Larch tree, are diuretic and somewhat astringent; and commended in the scurvy and cuticular diseases.

P O R T U L A C A.

S E C T. I.

Portulaca. offic. *Portulaca latifolia* seu *fativa*. *B. P.* 288. *T.* 236. *H. Ox.* ii. 570. *R. H.* 1039. *Portulaca fativa.* *Dod.* 661. *Portulaca hortensis latifolia.* *J. B.* iii. 678. *Portulaca.* *Park.* par. 499. *Portulaca domestica.* *Lob.* 210. *Ger.* 521. *Portulaca foliis cuneiformibus verticillatis sessilibus, floribus sessilibus.* *H. Cliff.* 207. Garden Purslane, *vulgo* Garden Purpy.—It bears a small black wrinkled seed, without taste, and almost without smell.

It grows plentifully in Jamaica. *Sloane's Cat.* p. 87. The *Portulaca angustifolia*, sive *sylvestris*. *B. P.* 288. Wild Purslane (of which the former is a variety according to *Linnaeus*) grows in Germany, France, Italy, Sicily. *R. H.* It is supposed to be the ἀνδορᾶχνη *Dioscoridis*, l. 2. c. 150. p. 138. who has cap. 151. an ἀνδορᾶχνη ἀγρία: but this is only a conjecture. *Vid. Bod. in Theoph.* p. 750.

S E C T. II.

The seed is one of the lesser cold seeds; and has been used in emulsions; when it is cooling and diluent; as is also the herb, when eaten in substance by way of salad.

“ *Officin.* Folia, semen. *Vires.* Refrigerat 3. siccant 2. astringit, pauci nu-
 “ trimenti est, lumbricos fugat & expellit. *Usus præcip.* in mitigando fervore
 “ bilis, & hinc in febribus putridis malignis, ardore urinæ, ut in scorbuto;
 “ apprime succurrit febricitantium æstui (folia recentia applicata jecori, reni-
 “ bus, &c.) *Præp.* 1. Succus inspissatus. 2. Aqua stillat. ex herba. 3. Sy-
 “ rupus simplex, ex succo. 4. Syr. composit. 5. Conserva, ex foliis.”
Schrod. 654. The stalks are sometimes pickled like capers.

Purslane is very juicy, of a soft oily taste, and no ways acrid: it may be useful in hot seasons and climates, and in bilious diseases and putrid scurries.
 “ Verum esus ejus nimius cavendus est, quoniam ob frigiditatem suam & hu-
 “ miditatem, in ventriculo putrescere apta est, ejusque & reliquorum viscerum
 “ tonum dissolvere, ut in nobismet ipsis non semel experti sumus.” *R. H.* 1039.
 “ Folia

“Folia sapore subacido.” *J. B.* “Sapores subacidi et mucilaginosi.” *N. B.* 234.

P S Y L L I U M.

S E C T. I.

Psyllium. offic. *Psyllium majus erectum.* *B. P.* 191. *T.* 128. *J. B.* iii. 513. *Psyllium.* *Dod.* 115. *Psyllium sive Pulicaris herba.* *Ger.* 587. *Psyllium vulgare.* *Park.* 277. *Psyllium annuum majus, foliis integris.* *H. Ox.* iii. 262. *Plantago caulifera Psyllium dicta.* *R. H.* 881. *Plantago annua; foliis integerrimis; caule ramofo, erecto.* *H. Cliff.* 37. Common Fleawort.—This produces a small, shining, somewhat oval, reddish-brown or black seed, convex on one side, and a little concave on the other; of a disagreeably insipid viscous taste.

It grows wild about Montpelier, &c. In gardens it flowers in July. “It grows in the southern parts of France, from whence we have the seed.” *Miller’s Bot.* 361. “*Psyllium folio est cronopodis simile, hirsuto, at longiore, ramulis dodrantalibus, totaque herbula fœni modo tenuis ac minutula. Coma vero ipsius a medio caule ducit initium, capitulis duobus tribusve conglobatis, in quibus semen pulicibus simile, nigrum atque durum. Nascitur in arvis & incultis. . . Fama est si virens herba domum importetur, non sinere in ea pulices gigni.*” *Dioscor.* l. 4. c. 70. p. 270.

“Theophrasto 7. hist. 8. *κυνόπα* dicitur: oculum canis, & Canariam Gaza vertit, Plinium forte imitatus, qui l. 25. c. 11. *Psyllium & Cynoides* nominavit, Latinis pulicaria.” *B. P.* Hence it is evidently the *Psyllium Antiquorum*.

S E C T. II.

It is antacid, incrassating, and lubricating; called a cholagogue by some; and said to be virulent. It is commended in the dysentery, erosion of the intestines, dry coughs, hoarseness, &c. But there is now little use made of it; only its mucilage is sometimes applied to sore eyes, mouths, throats, burnings, excoriations, &c.

“Evacuat bilem flavam, mucilagineque sua acrimoniam humorum obtundere aptum est. Hinc convenit maximopere in dysenteria, & corrosione intestinorum. Dosis a ʒij. ad ʒvj. *scil.* ex his aqua convenienti extrahitur mucilago propinanda, sed raro. *N.* Hoc peculiare præ cæteris purgantibus habet, quod qualitate refrigerandi sit præditum, secus ac Mesue statuit. Verum enimvero nec tamen extra reprehensionem positum est, quam in currit ratione virulentæ suæ. *Præp.* Electuarium de Psyllio. Dosis ʒj.” *Schrod.* p. 772.

I. It is insipid; yet nauseously viscous, or mucilaginous. I discover no acrimony in it. “Semen mansu aut maceratione mucilaginem abunde reddit” *J. B.* Sapor plantæ amarus, odor nullus manifestus. *R. H.* 882. “Semina saporis primum mucilaginosi, postmodum acris & nauseosi.” *Herm. Cynos.* p. 330. “Saporis mucilaginosi, simulque acris & nauseosi.” *Dale* 215. “Dum masticantur in mucilaginem temperatam abeunt; cortices eorum

“sunt acres.” *Nucl. Belg.* 236. “Psyllium est vel album, vel nigrum, vel subpurpureum: duabus substantiis compositum, medulla scil. interiore calida sicca ordine 4. acri admodum, incidente rubificante, ulcerante venoso: cortice vero frigido multum.” *Mesue Simpl.* c. 20. fol. 43. which account no ways agrees with our Psyllium. — 2. Water easily extracts plenty of mucilage from it; and consequently as easily dilutes it. Hence it differs much from birdlime; and its viscosity cannot render it virulent. Its mucilage, in a large quantity, may be somewhat offensive to the stomach; but the same may be said of gum tragacanth, symphytum, althæa. Yet—3. It was of old numbered among poisons. “Vis ei refrigerans,” says *Dioscorides*, l. c. and below, “vehementer refrigerat; sed & in ferventem aquam immixtum calorem reprimat;” and commends it for pains, inflammations, tumors, ulcers; but outwardly only. And *Alexiph.* c. 10. p. 406. he says, “Quod Psyllium dicitur epotum corpori toti frigus & torporem infert cum exolutione, & animi quadam ægitudine anxietateve. According to *Galen (Simpl.* l. 8. p. 64. A.) Psyllium semen habet admodum utile, ex secundo refrigerantium ordine: in desiccando vero & humectando medium quodammodo est & symmetrum.” The *Ill. Boerb.* among the “toxica quæ incrassando, obstruendo, &c. cito vel lenta morte perimunt,” has “Psyllii semen cynosbati spongia, fungi, agaricus, viscum.” *Instit.* § 1143. But it is commonly used in Egypt, especially the mucilage extracted with rose-water, &c. in all bilious, ardent fevers, pleurisy, peripneumony, diarrhœa, dysenteria, &c. vid. *Alpin. de Pl. Æg.* c. 42. p. 129. & *de Med. Ægypt.* l. 4. c. 1. fol. 118. b. “Utuntur frequentissimè & feminibus Psyllii, maximeque in febribus ardentibus, quorum infusum, seu mucilaginem, tutissimè propinant ægrotis. Ex quo prospicitur errare cum Dioscoride omnes, qui Psyllium venenum esse scribunt; quando ibi tutissime, nemine ab eo unquam læso, Psyllium assumatur.” To which if we add, that it is a species plantaginis, we may conclude that there is nothing virulent in Psyllium, more than in Symphytum. Mesue makes the skin antacid; but the kernel very acrid, ulcerating, and virulent.

R H U S.

S E C T. I.

Rhus, Rhus obsoniorum, Sumach. *offic.* Rhus folio ulmi. *B. P.* 414. *T.* 611. Rhus coriaria. *Dod.* 779. *Ger.* 1474. Rhus sive Sumach. *J. B.* i. 555. *R. H.* 1590. Rhus obsoniorum & coriariorum. *Clus. H.* 17. Sumach sive Rhus obsoniorum & coriariorum, *Park.* 1449. Rhus foliis pinnatis, ferratis. *H. Cliff.* 110. Common Sumach—has small, round, hairy, reddish seeds, very hard, and of an astringent taste; and no smell. It grows wild in South France, Spain, Italy, &c.

The Rhus Virginianum, *B. P.* 517. *T.* 611. *R. H.* 1591. Virginian Sumach is much more common here, and of the same nature, being a variety only. “Rhus qui obsoniis aspergitur, quemque nonnulli erythron appellant, fructus est rhois coriariæ, sic vocatæ quod ea coriarii ad spissanda coria utantur. Est vero arbuscula in petris nascent, binum fere cubitorum altitudine,

“ in qua folia sunt oblonga, subrubentia, & in ambitu serrata: fructus autem racemulis similis, densus, terebinthini magnitudine, quadantenus latus, cuspis corticosa tunica, acinos ambiens, perquam utilis est, &c.” *Diosc.* l. i. c. 147. “ Rhus, ῥεῦς, & Hippocrati ῥέος, a coccineo acinorum colore dicitur: ῥεῦς enim ῥυθρον interpretantur, unde rufus, vox Latina.” *B. P.*

“ Viburnum.” *Matth.* “ Rhus coriariarum.” *Theophrasti & Plinii Casalpino*, videtur.” *B. P.* 429, Hoffman is for writing it Rus, not Rhus, because it is originis Syriacæ (vid. p. 438); which is trifling, since adopted a Græcis.

S E C T. II.

It is astringent; and may be used like bistort, &c. The leaves are of the same nature.

“ *Officin.* Semen, Folia. Refrigerat 5. siccatur 2. astringit. *Ufus præcip.* in fluxu alvi, uteri seu mensium: hæmorrhoides compescit, bilem obtundit. “ Extrinsicus resistit putrefactioni ac gangrænæ in paronychio. *N.* Gummi dentibus inditum odontalgiam sedat. *Præp.* Succus Sumach, *i. e.* Pulpa sine ossibus seminibus.” *Schrod.* 663.

As by the taste, so by every experiment, it is as astringent as galls or oak bark. The outward skin, or pulp, for it may be called a berry, is acid to the taste. “ Grana, cuticula acidi saporis sunt obdusa. *J. B.* Notat Sylvius “ Rhois succum esse vice omphacii in Gallia Narbonensi.” *R. H.* 1591. It was an ingredient in the syrupus myrtinus. But this syrup is omitted in *Ph.* edit. 1744. as it is also in *Ph. Lond.* together with the unguentum e Sumach.

S A N T O N I C U M.

S E C T. I.

Santonicum, Semen Sanctum, Semen Lumbricorum. *offic.* (*aliis* Semen contra, Sementina & Semen Zedoariæ.) Absinthium Santonicum Alexandrinum. *B. P.* 139. *R. H.* 368. Absinthium Santonicum Alaxandrinum five Sementina, & Semen Sanctum. *Park.* 102. Semen Zedoariæ Belgis. *Lob. Adv.* 337. Sementina. *Dod.* 27. *Ger.* 1100. Lumbricorum semen vulgare, & Matthioli. *J. B.* iii. 180. Semen contra, Sementina, Sementina, Semen Sanctum, Santolina. *offic. Geoff.* ii. 466. The Common Worm-Seed.—This looks like a coarse vegetable powder, consisting of several small scales inclosing one another, easily separable, with fragments of leaves and stalks among them; but not like seed though viewed with a microscope; the whole being very friable, of a greenish yellow (or brownish) colour, of an aromatic bitter taste, and pretty fragrant smell.

It is brought from the Levant; but what plant it belongs to, and where it grows, authors are not agreed. “ Ex Alexandria adfertur.” *Dale* 100. “ It is brought to us from Alexandria and Smyrna, and is said by Rauwolf to grow about Bethlehem in Judea.” *Miller's Bot.* 392. “ It grows in the meadows in the kingdom of Boutan.” *Lemery's Diet.* p. 500. “ It comes

“ from Persia, and the confines of Muscovy, to Aleppo, Scanderoon, and Smyrna, whence the French, English, and Dutch bring it.” *Savary’s Dict.* i. 267. “ It comes to Marseilles from Persia, by Smyrna and Aleppo, from 80 to 100 quintals annually.” *Savary’s Dict.* iii. 431.

“ Nulla quidem res in officinis magis usitata, & cujus origo minus cognita sit. Dubitant adhuc num semen sit, vel capsula seminalis, vel foliorum aut florum germina? Quænam sit planta quæ eam proferat, an Zedoaria, an Absinthii, an Abrotani species, an Chamæcyparissus? Num in Galliâ proveniat, in Palæstinâ, in Ægypto, vel in Persiâ, aut in solo regno Boutan, in Indiâ orientali remotissimâ.” *Geoff.* ii. 466. Some make it an Absinthium, others an Abrotonum, Santolina, Tanacetum, &c. all with equal certainty. “ It seems to be only the young buds of the flowers of some Abrotonum mas, rather than a wormwood, both from the smell, which comes nearer to that, and because there may be seen a great many fragments of southernwood, like leaves among it, before it be garbled.” *Miller’s Bot.* 393. I have seen also something like down within the small scaly heads. “ Paulus Hermaus Abrotoni speciem esse censet, quæ in Persia, &c. reperitur. Cum quo consentire videtur celebris peregrinator Tavernerius.” *Geoff.* ii. 467. where see this traveller’s way of collecting it in the kingdom of Boutan, which to me seems fabulous. In *Lin. Sp. Plant.* p. 845. there is described briefly an artimesia, foliis caulinis linearibus pinnato multifidis, ramis indivisis, spicis secundis reflexis, which he calls Santonicum N. triv. and makes the same with semen sanctum. *Lob. Ic.* 746; though here the folia are not pinnata, and the rami multifidi. *Obiter.* Are the terms here used very plain? “ Spica secunda floribus ad unum idemque latus versis.” *Lin. Pb. Bot.* p. 41.

“ Satum nonnullis in locis vidimus semen peregrinum istud, ex quo fruticulus furculosus enatus fuit, undequaque seminibus gliscens, pluribus ferme quam foliis.” *Lob. Adv.* 337. “ Reticere nequeo quod mihi contigit. Bis semen terræ commisi quod in officinis seminis sancti nomine venditur, bis ex eo nata nobis tanaceti genus, cujus effigiem adsculpendam curavi: differt a vulgato, quod folia sint minus viridia, sed candidiora paulum.” *Bod. in Theoph.* p. 1151. “ Pluries illud (semen sanctum vulgo dictum) sevimus, sed nunquam potuimus natum videre. E Monac. in *Mes. J. B.* iii. 181. “ Aliquoties sevi semen lumbricorum Montbelgardi, in horto Ill. E. C. & aliis locis, sed non mihi provenit; ita ut Lobelium vagum & inanem jactatorem dixerim.” *J. B.* iii. 182.

One of Dioscorides’s Absinthia is Santonicum, from a province in France: hence semen Santonici, & semen sanctum: and from semenza in Italian comes semenzina, the diminutive “ quod imperiti corumpunt in sementina, in semen zinæ, seu zedoariæ.” *Hoffman*, p. 82. It is evidently a seed with *Dr. Hill*. *The New Disp.* p. 199, makes it one too.

S E C T. II.

This agrees with abrotonum in virtues; but is used as an anthelmintic only: and is given to ʒj. in any convenient vehicle. It is an ingredient in the pulvis vermifugus.

Officin. “Semen, quod affertur ex Alexandria Ægypti. Calfacit & siccat, “saporis amari est. *Ufus* in lumbricis cujuscunque generis enecandis, fugandis & expellendis. *Præp.* 1. Semen Santonicum præparatum, *i. e.* in aceto destillato (diebus 45.) maceratum atque exiccatum. 2. Confectio seminis cinæ.” *Scbrod.* 673.

1. It is aromatic, bitter and somewhat acrid, and of a strong smell. “Amarum sunt cum acrimonia, & odore graviusculo.” *J. B.* “Saporis amari aromatici, fere instar radicis zedoariæ, sicut etiam odoris.” *Nucl. Belg.* 256. “Sapore ingrato, amaro, cum acrimonia quadam aromatica; odore aromatico, graviusculo & nauseoso.” *Geoff.* ii. 466. — 2. A decoction of it actually kills worms. “Seminis sancti amplam & validam infusionem fieri curavi in aqua communi calida, eamque duabus horis in Mariano balneo reliqui. Postquam vero perfrigida facta est, in eam, non educto semine, conjeci quatuor lumbricos, qui intra septem horas mortui sunt. Post hæc infusionem illam pari aquæ communis copia dilui; & quatuor alii lumbrici in eam conjecti, intra octo horas interierunt.” *Redi de Animal viv.* p. 159, “Baglivius observat esse mortuos ante quinque horas. Datur in substantia a ʒss. ad ʒj. cum melle vel lacte.” *Albin. MS.* But aqua graminis killed the worms much sooner. *Mr. Geoffroy* gives its chymical principles without an analysis. “The only use it is put to is to destroy worms in children, being mixed with treacle, or some sweet vehicle, in which it is usually put whole, without bruising or powdering.” *Miller’s Bot.* 393. However it is now excluded the London M.M. *Boerhaave* ordered Santonicum with other bitters in wine, for a tertian.

S E S E L I.

S E C T. I.

1. Sefeli, Sefeli vulgare, Siler, Siler montanum. *offic.* Ligusticum quod Sefeli officinarum. *B.P.* 162. *T.* 323. Sefeli, five Siler montanum vulgare. *J.B.* iii. 2, 168. Siler montanum. *Dod.* 310. *Clus.H.* ii. 195. *H.Ox.* iii. 276. Siler montanum officinarum. *Lob.* 425. *Ger.* 1048. *R.H.* 439. Siler montanum, vulgo Sefelios five Ligusticum verum. *Park.* 909. Laserpitium foliis lanceolatis, integerrimis, petiolatis. *H.Cliff.* 96. Mountain Siler, or Common Hartwort.—This has oblong, striated and margined brown seeds, of a hot, bitterish, aromatic taste; and fragrant smell—It grows in the mountains about Geneva, upon the Alps, &c. In gardens it flowers in June. It is generally taken for the Ligusticum *Dioscoridis*, l. 3. c. 58. p. 198. though the description does not well agree to it. “Siler nunc appellant, nomine a Sile deducto, quia pro Sefeli semine utuntur; at veteres ipsum Sefeli etiam Sili & Seli vocabant.” *B.P.* Dioscorides has four Sefelis, *viz.* Massiliense, Æthiopicum, Pelopenense, & Tordylium quod aliqui Sefeli Creticum vocant. *vid.* l. 3. c. 60, 61, 62, 63; about which authors not being well agreed; and the Siler montanum, so far as appears, being inferior to none of them (“*Bodæus* semen Sileris majoris acridinis esse scribit quam ullum Sefeli.” *R.H.*) it may suffice for all; as it does in *Ph. Lond.* 1721. and 1746. Our dispensatory uses the Sefeli.

Sefeli Massiliense. *Dale* has two Sefeli Massilienses, off. one p. 116. and another p. 129: the last of which is the following,

2. Sefeli Massiliense. *offic.* French Hartwort, or Hartwort of *Marseilles*. —The seed is small and striated like fennel seed, of a light greenish colour, of an acrid aromatic taste, and somewhat aromatic smell, but neither very pleasant. It is supposed to be the seed of the *fœniculum tortuosum*. *J. B.* iii. 2, 16. *T.* 311. *R. H.* 460. Sefeli Massiliense, *fœniculi folio*, quod *Dioscoridis* censetur. *B. P.* 161 *Park.* 903. Sefeli Massiliense. *Ger.* 1051. Sefeli Massiliense *Dioscoridis*. *Clus. H.* ii. 193. *Ænanthe*, striata, rigida. *H. Cliff.* 99. *Saxifraga montana minor*, *fœniculum tortuosum dictum*. *H. Ox.* iii. 273. It grows in Provence, Sicily, &c. *Dale's* other Sefeli Massiliense. *offic.* is the Sefeli Massiliense, *ferulæ folio*. *B. P.* 161. Sefeli Massiliense, *Ger. R. H.* 414. Sefeli Massiliense *nuperorum folio aliquatenus visnagæ*. *J. B.* iii. 2, 33. Sefeli Massiliense alterum. *Ger.* 1051. *Libanotis Massiliensis*, *ferulæ folio*. *H. Ox.* iii. 310. Italian Hartwort: which I find not in *T. B.* nor *H. Cliff.* According to *Schroder* the seed of either is used indifferently.

S E C T. II.

The Siler is an acrid aromatic attenuant, diaphoretic, diuretic and carminative; called stomachic, uterine and alexipharmic; and commended in phlegmatic and flatulent diseases of the stomach and guts, in obstructis mensibus & lochiis, in partu difficili, hysteric fits, convulsions, &c.

The Sefeli Massiliense is reckoned of the same nature, though inferior in efficacy. One or other of them is in the *Mithridat.* and *Theriaca*.

“Sefelios officinarum semen, calfacit, siccatur, menses & urinas ciet, flatus discutit.” *Schrod.* 682.

“Sefeli Massilioticum calfacit & siccatur ad gr. usque 3, incidit, aperit, discutit. *Ufus præcip.* in morbis capitis, epilepsia, imbecillitate visus, spasmo, &c. in pulmonum ac pectoris affectibus, tussi, catarrhis; in epatis obstructione, hydropo, ventriculi cruditate ac inflatione, in calculo renum ac vesicæ, in mensibus obstructis. Specifica antidotus est cicutæ. Extrinsecus in spasmo, contractis, in lacte mammarum coagulato, in uteri impuritate ac obstructione.” *Schrod.* p. 683.

They are aromatic, somewhat bitter, and fragrant oily seeds. “Sileris semen, sapore acri & subamaro, veluti corticis aurantii, tandem ad Cymini saporem accedente.” *J. B. R. H.* “Saporis acris amaricantis aromatici, quasi ex corticibus aurantiorum & cumino mixti.” *Herm. Cynof.* 294. *Dale* adds, “Odoris fragrantis.” p. 123. “Saporis valde calidi, & subamari, fere instar terebinthinæ, sicut etiam odoris.” *Nucl. Belg.* 273. “Fœniculi tortuosi tota planta odorata est; semen subamarum, calidum manifeste.” *J. B.* “Sefelios Massiliense semen odoris fortis, aromatici; saporis valde acris & calidi.” *Nucl. Belg.* 273. vid. *Bod. in Theophr.* p. 1126.

LECTURE LXX.

SINAPI.

SECT. I.

1. **SINAPI**, Sinapi nigrum. *offic.* Sinapi rapi folio. *B. P.* 99 *T.* 227. *H. Ox.* ii. 215. Sinapi sativum prius. *Dod.* 706. Sinapi siliqua latiuscula glabra, semine ruffo, sive vulgare. *J. B.* ii. Sinapi sativum secundum, *Ger.* 243. *R. H.* 803. *Syn.* 295. Sinapi sativum rapi folio. *Park.* 831. Sinapis, filiquis glabris, tetragonis. *H. Cliff.* 338. Black or Common Mustard.—The seed needs no description, being well known.

It is sowed in gardens, banks of ditches, &c. and flowers in June. Is it a native of Britain? “In hortis & areis, inque fossarum aggeribus, & terra recens & effossa sponte & copiosissime exit.” *R. H.*

2. Sinapi album siliqua hirsuta, semine albo vel ruffo. *J. B.* ii. 856. *R. H.* 852. *Syn.* 295. White Mustard—which may be used indifferently with the black. Dioscorides does not describe it; but several characters of it are to be met with in Theophrastus. *vid. Bod. in Theoph.* p. 796.

“Σινάπι, σινηπί Dioscoridi, l. 2. c. 184. (p. 151.) et Theoph. 7. hist. 3 et 6. παρὰ τὴ συνεσθαι τὴς ὀπας, oculos enim lædit: dicitur etiam Theoph. *ναπί* quasi immite, ob vehementem ejus acrimoniam: & Athenienses napy appellasse Plin. l. 19. c. 3. author est, Sinapi nominans. Unius Dioscorides & Theoph. meminere: at Plinius genera tria facit: unum gracile, alterum simile rapi foliis, tertium erucæ.” *B. P.*

SECT. II.

It is very acrid, antacid, attenuant, and diuretic, like horse-radish; called stomachic, and lithontriptic; and is commended inwardly in the scurvy, dropsy, lethargy, palsy, agues, and all cold phlegmatic or leucophlegmatic diseases; and outwardly as an epispastic, or sinapism, cum aceto mistum.

“Calfacit et siccat 4. incidit, attenuat, attrahit, rubificat. *Usus præcip.* in appetitu excitando, chylicatione promovenda: in affectibus hypochondriacis ac quartana ex mucilagine tartarea; item in quotidiana, (ante paroxysmum dos. ʒj. exhibita) in calculo; caput purgat. Extrinsecus in sinapismis, in arcendo caro (vel naribus inditum); tumores maturos aperit, sternutatio-nem movet. *Præp.* Oleum, ex sem. expressum,” *Schrod.* 684.

1. It is of a very hot, biting, bitterish taste, and pungent smell when bruised. Every body knows how, even in the mouth, Mustard affects both the nose and the eyes. The leaves are fully as acrid as the seed. “Saporis acerrimi & calidissimi.” *Nucl. Belg.* 274. “Sapor foliorum, sed præcipue feminum, fervidus et acerrimus; attritaque acri odore nares feriunt.” *R. H.* 802. yet its expressed oil is not acrid. — 2. It abounds with a volatile alkali, and is alkaline. “Semen optimum Sinapis, solum contitum, affuso acerrimo aceto
“ effer-

“effervescere memini,” *Boerb. Chem.* ii. 142. “Mustard seed, by a chemical analysis, gives much more indication of an acrid salt than of an acid; but they draw from it a very considerable quantity of oil, very little fixed salt simply saline, much earth, little urinous spirit, no volatile salt.” *T. list.* p. 363. See the analysis more accurately performed in *Boerb. Chem.* ii. process. 33. — 3. Externally applied it heats, inflames, blisters the skin: and hence many ways useful. Thus Dioscorides commends it (as an apophlegmatic masticatory, errhine, epithem, cataplasm) in epileptic and hysteric fits, lethargy, sciatica, spleen, “ac in universum, ad quemvis diutinum dolorem,” for baldness, tetters, leprosy, deafness, dimness of sight, &c. — 4. Internally it is much used in the scurvy, dropsy, palsy, &c. (*vid. raphanus rusticus*): and sometimes as a vomit. “Semen Sinapeos in mortario tritum & cum vino albo mixtum, multas centurias scorbuticorum & languentium hominum in obsidione Rupellensi sanitati restituit. Plerique enim obsefforum, fame & inedia pressi, multa sordida, & quæ natura abhorret, esitare coacti, respirandi difficultatem, gingivarum putredinem, dentium nigritiem & vacillationem, aliaque scorbuti symptomata contraxerant, unde multi moriebantur; donec tandem Sinapi in fossis circa urbem copiose inventum, & quo dictum est modo adhibitum omnes liberavit. Ex relatione D. Mervault, qui toto obsidionis tempore in urbe manebat.” *R. H.* 803 and 804. where we find a man very subject to a vertigo and apoplexy, who used mustard successfully as a preservative. Why is vinegar mixed with Sinapi in Sinapisms?

STAPHISAGRIA.

SECT. I.

Staphisagria. offic. *Staphisagria. B. P.* 324. *Dod.* 366. *Matth.* 850. *Lob.* 393. *Ger.* 495. *Park.* 222. *J. B.* iii. 641. *R. H.* 705. *H. Ox.* iii. 465. *Delphinium platani folio, staphis agria dictum. T.* 428. *Delphinium nectaris diphyllis, foliis palmatis, laciniis fere integris. H. Cliff.* 213. *Staves-acre* or *Louse-wort*. — This has large, wrinkled, angular seeds, of a blackish colour; of an acrid, burning hot taste, and no smell.

It grows in Italy, flowering in June. “*Staphisagria, σταφίς αγρία* Dioscoridi, l. 4. c. 156. p. 301. *Astaphis agria*, sive *staphis* Plinio, l. 23. c. 1. “*Latinis herba pedicularis ab effectu. In Græcia nunc φθειροκοκκον, granum pedicularium nominatur.*” *B. P.* “*Quidam pituitariam vocant.*” *Plin.* l. 23. c. 1. p. 589. Dioscorides’s description agrees pretty well with this plant, only I see not how it can be said to bear a flower like that of the isatis.

SECT. II.

It is said to be emetic and cathartic; but so dangerous, that it is used only outwardly, in masticatories, sinapisms, epithems, for the tooth-ach, palsies, phthiriasis, &c.

“Inter-

“ Internus usus purgatorius est, sed rarus. Extrinsecus ejus usus est apophlegmatifans, in masticatoriis, gargarismis odontalgicis (cum aceto) ac abstergentibus, in ulceribus et papulis, &c. adhibetur et in phthiriasi.” *Schrod.* 687. “ Purgat, sed cum metu strangulationis, ideo desit usus ipsius. Dioscorides in id dat gr. x. aut xv.” *Hoffman*, p. 448.

It is not only excessively acrid, or caustic, but also suspected of virulency. “ Vehementer calidam, acrem & causticam obtinent facultatem, inquit Gale-nus, l. 8. *Simpl. Hoffman*, p. 448. “ Interne est venenum fere instar oleandri.” *Nucl. Belg.* 278. “ Uridæ facultatis vi gustatu os incendunt.” *R. H.* “ Saporis acris & fervidi, exurentis, ingrati & nauseosi odoris.” *Dale* 179. Yet *Sylvius de la Bce* fancies it may be of use in lue venerea, inwardly taken a gr. xii. ad ʒj. vid. *Metb. Med.* l. 2. c. 13. § 59, 60. or *R. H.* 705; though any salivation excited thus can do no good in that disease.

T H L A S P I.

S E C T. I.

1. *Thlaspi verum. offic.* *Thlaspi arvense* filiquis latis. *B. P.* 105. *T.* 212. *H. Ox.* ii. 293: only it is here filiculis, in place of filiquis. *Thlaspi latius. Dod.* 712. *Thlaspi Dioscoridis. Ger.* 262. *R. H.* 831. *Syn.* 305. *Thlaspi filiquis orbiculatis, foliis oblongis, glabris. Fl. Lap.* 209. *Thlaspi drabæ folio. Park.* 835. *Thlaspi filiquis orbiculatis, foliis oblongis, dentatis glabris. Fl. Lap. H. Cliff.* 330. Treacle-Mustard, or Penny-Cress;—which bears a small, roundish, black seed, somewhat flattened and marked with concentric oval striæ, of an hot, biting, bitterish taste; with the flavour and smell of garlic. “ *Semina rotunda, cum striis circularibus, saporis acris.*” *J. B.*

This is supposed to be the *Thlaspi Dioscoridis*, l. 2. c. 186. p. 152. It grows wild in several places of Britain. In gardens it sows itself so plentifully as to become a troublesome weed. “ The seed of this plant is what ought to be used in the theriaca and mithridate; but, being scarcely to be had, the seed of the *Thlaspi vulgatiſſimum. Ger.* may be used as a succedaneum for it.” *Miller’s Bot.* 436. The *Pharm. Lond.* ed. 1721. and *Pb. Edinb.* have but one *Thlaspi*, viz. *Thlaspi arvense filiquis latis. B. P.* but the *Thlaspi semen* of the *New London M. M.* is either *Thlaspi arvensis, filiquis latis, vel Thlaspi arvensis vaccariæ incano folio majoris. C. B.* That is,

2. *Thlaspi vulgatiſſimum. J. B.* ii. 921. *T.* 212. *R. H.* 830. *Syn.* 305. *Thlaspi arvense, vaccariæ incano folio, majus. B. P.* 106. *H. Ox.* ii. 294. *T. alterum. Dod.* 712. *T. vulgatiſſimum. Ger.* 262. *T. mithridaticum sive vulgatiſſimum, vaccariæ folio. Park.* 835. “ *Thlaspi. Chab.* 29. *Thlaspi vulgare. offic. Merc. Bot.* i. 72. *Phyt. Brit.* 120.” *Dale* 207. *Thlaspi filiculis subrotundis, foliis sagittatis, dentatis, incanis. H. Cliff.* 330. Mithridate Mustard;—the seeds of which are smaller than the former, of a brown or reddish-brown colour, and hot biting taste, like sinapi or nasturtium.

“ The seed of this *Thlaspi* is generally used instead of the former.” *Miller’s Bot.* 437. “ *Genera varia sunt, eaque promiscue usualia. Præferuntur tamen arvensia.*” *Schrod.* 691. Hence, there being many species *Thlaspios*, au-

thors vary in describing the seed. “E multis *Thlaspios* speciebus, nulla datur quæ æquè congruat, aut conveniat *Dioscoridis* *Thlaspios* delineationi, ac hoc *Thlaspi* πλατυ καρπον. . . Semina ejus nigra, acria, gustu ferventia, allium nonnihil resipientia. . . *Thlaspios* vulgarissimi. *Ger.* semina ruffa, mordacia, acria, nasturtii hortensis feminibus similia,” secundum *H. Ox.* locis citatis. *Parkinson* also observes, that the treacle-mustard seeds are of a blackish-brown colour, somewhat sharp in taste, and of the smell of garlic: the seed of *Mithridate-Mustard* being brown, smaller, and much sharper in taste.

“*Thlaspi* esse ἀπο τῆς θλάς, etiam *Galen.* 1. antidot. 14. indicat, fecisse Græcos in genit. non θλασπῆως, sed θλασπισῆος, indicio sit diminutivum θλασπισιδιον, quod idem esse cum primitivo sæpe dixi. Ingreditur hoc semen theriacam. Sed quid sumendum? Quatuor ex arvensibus sunt apud *Bauhinum*.” *Hoffman* 452. In *Dioscor.* l. 2. c. 186. is περι θλασπῆως, p. 152: and in *Celsus*’s *Antidotum Mithridatis* it is *Thlaspis* in genitivo.

S E C T. II.

It is acrid, antacid, attenuant, and diuretic like nasturtium or alliaria: but it is somewhat milder than Mustard, and may be used the same way. It is commended for the scurvy, dropsy, gout, sciatica, internal abscesses to forward their breaking, &c. but is little used except in the *Mithridate* and *Theriaca*, and, consequently, in the aqua & acetum *Theriacale*.

“Calfacit & siccit 4. abstergit. *Usus præcip.* in internis abscessibus rumpendis, mensibus ciendis, ischiaticis affectibus curandis. Extrinsecus abstergit ulcera quæcunque manantia; insuperque ptarmicum est, sed minus vulgare. *N.* Gravidis, quia foetum necat, infensum censetur.” *Schrod.* 691. In *Boerb. Lib. de M.M.* it stands among the antacida.

It is hot, biting, bitterish; and though while entire it lasts some years, yet bruised or boiled it soon loses its acrimony. “The seeds are sharp in taste, burning the tongue as doth mustard-seed, leaving a taste or savour of garlic behind for a farewell.” *Ger.* 261.

T R I T I C U M.

S E C T. I.

Triticum. offic. *Triticum hybernum*, aristis carens. *B. P.* 21. *Tbeat.* 352. *T.* 512. *H. Ox.* iii. 175. *Triticum. Dod.* 489. *Triticum vulgare* glumas triturando deponens. *J. B.* ii. 407. *Triticum spica mutica. Ger.* 65. *Park.* 1120. *R. H.* 1236. *Syn.* 386. *Siligo spica mutica. Lob.* 14. *Triticum radice annua, spica mutica. H. Cliff.* 24. Wheat, white or red, without awns.

Where it grows naturally I know not. For the *Triticum sylvestre* *Creticum* *B. P.* seems to resemble the grains of rye more than wheat. vid. *R. H.* 1240. However it is cultivated every where in Europe. It is (a.) one, at least, of the most fertile grains. “*Tritico nihil est fertilius: hoc ea natura tribuit, quoniam eo maxime alat hominem.*” *Plin.* l. 18. c. 10. where he mentions

near 400 germina from one grain, which was sent from Byzantium to Augustus, &c. (β.) It suffers cold as well as heat: it thrives in our northern countries very well; and also in Africa, East-Indies, &c. if the soil be not too rich and fat. vid. *R. H.* 1238. (γ.) If sowed before the winter, neither drought nor heat ever spoils its crop: hence the proverb in Britain, *Dearth came never after drought.* vid. *R. H.* 1238.

“Triticum, πυρος dicitur Græcis, quasi σπυρος pro σπορος, ἀπο τε σπειρειν, “secundum etymologicum.” *B. P.* 20. *Dioscorides*, l. 2. c. 107. περι πυρων, p. 124. But *Bodæus in Theoph.* p. 934. b. has made a sort of description out of what Theophrastus has said in several places concerning it. See there the etymons, and various learned criticisms ad p. 936. It is called also σιτος, i. e. Cibus & Frumentum a fruendo.

S E C T. II.

It is acescent, antiseptic, and nourishing. And rightly prepared wheat-bread may be reckoned as wholesome, both in sickness and health, as any food whatsoever: outwardly applied it softens, and discusses or suppurates tumors; eases pains, cleanses the skin of scurf, scabs, &c.

“*Officin.* Semen, ejusque farina & furfures. *Vires.* Moderatè calfacit, “emollit, maturat, discutit: internus ejus usus cibarius est, multum enim ac “bonum nutrimentum suppeditat; increffat, & obstruit. Extrinsecus adhi- “betur (farina) in tumoribus molliendis, leniendis, &c. in oculorum inflam- “mationibus & fluxionibus (cataplasmatis forma imposita) in erysipellate poda- “gricisque doloribus leniendis (sicca farina imposita) furfures abstergunt squa- “mulas capitis, leniunt dolores (in cataplasm. aut sacculis.) Triticum tri- “mestre inservit amylo conficiendo. *Præp.* 1. Aqua stillat. ex pane in M. B. “sistit fluxus alvi in infantibus, &c. 2. Oleum tritici per descensum, sed “inusuatum est.” *Schrod.* 694.

It is, and has always been, more-used in food than in medicine; and the bread made of it generally preferred to that of any other grain: but whether bread made of the finest flower or of the coarsest, of the leavened or unleavened, be preferable for common use, is controverted; though in my opinion not difficultly determined. “Farinæ confusaneæ minus quidem nutriunt, magis “autem alvum dejiciunt puræ vero plus nutriunt, minus autem per alvum “secedunt.” *Hippoc. de Vict. rat.* l. 2. p. 355. l. 24. The reason is obvious; as is that also in what circumstances coarse bread is preferable to the fine. “Concoctu autem inter panes sunt facillimi, qui plurimum sunt fermentati, “& pulcherrime subacti, quique in clibano igne moderato fuerunt assati. . . . “Panis is athletæ quidem est accommodus, qui neque bellissimè est assatus, “neque multum habet fermenti: privato autem & seni, qui bellissimè quidem “in clibano est assatus, fermenti autem habet multum: porro qui fermento “omnino caret, nemini prorsus est accommodus.” *Galen de Alim. facult.* l. 1. c. 2. p. 9. H. The fermenting or leavening of flour attenuates its viscosity, and facilitates its concoction in weak and lax constitutions, in the lazy and indolent: but as the active and laborious need not this assistance from art; so unleavened grain proves the more medicinal to the hot and choleric constitu-

tions and diseases. Again, some think barm makes bread the worse; but without all reason: for it is nothing but the natural fermentum hordei, which both facilitates and shortens much the fermentation or leavening of bread.” “Galliæ & Hispaniæ frumento in potum resoluta, quibus diximus generibus, spumâ ita concretâ pro fermento utuntur. Qua de causa levior illis quam cæteris panis est.” *Plin.* l. 18. c. 7. For a more full account of this grain, of its preparations, and uses among the ancients; of the chondrus, alica, far, althera or althara, &c. vid. *B. Theat.* col. 351. ad 410.

As for bran, all its virtues depend on the farina adhering to it. The amyllum is the purest farina, freed from all the bran, and much of its oily and saline parts; so is more glutinous, antacid, and incrassating, than the farina itself.

Among the 41 *problemata de pane* proposed & solved by the learned *Renatus Moreau*, M.D. in his *Animadversions on the Schola Salernitana* (printed at Paris in 1625. 8vo. in Latin) one (N^o. 12.) is, “Cur in Scotia optimus omnium panis esse dicitur?” And after several conjectures he rests in Scaliger’s opinion as to the effect of snow in meliorating the earth, to which the goodness of our bread may be owing. *vid.* p. 291. But certainly the grain is as good, or rather better, in England or France. The sweetness therefore of our barm, little hops being used in our common malt liquors, may answer the question better, if the supposition be true, and if hop’d liquors were common in every other country.

U R T I C A.

S E C T. I.

1. *Urtica*, *urtica vulgaris. offic.* *Urtica urens maxima. B.P.* 232. *T.* 534. *H.Ox.* iii. 434. *Urtica urens altera. Dod.* 151. *Urtica vulgaris major. J.B.* iii. 445. *R.H.* 160. *Urtica urens. Ger.* 706. *Urtica major, vulgaris, & media sylvestris. Park.* 440. *Urtica racemosa major, perennis. R.Syn.* 139. *Urtica foliis oblongo-cordatis (dioica) fœmina. H.Cliff.* 440. *Urtica foliis cordatis, amentis cylindraceis, sexu distincta. Fl.Lap.* 299. Common great stinging Nettle.—This is common every where. It bears small, smooth; roundish, pale seeds, of a farinaceous, subacid, weak taste, and no smell; which are frequently used; as are also sometimes the roots and leaves.

2. *Urtica Romana. offic.* *Urtica urens, pilulas ferens, prima Dioscoridis, semine lini. B.P.* 232. *T.* 535. *Urtica urens prior. Dod.* 151. *Urtica Romana sive mas, cum globulis. J.B.* iii. 445. *Urtica Romana. Ger.* 706. *Park.* 440. *R.H.* 161. *Urtica pilulifera facie Urticæ vulgaris, semine lini. H.Ox.* iii. 435. *Urtica pilulifera folio profundius, Urticæ majoris in modum serrato, semine magno lini. R.Syn.* 140. *Urtica amentis fructiferis, globosis, androgyna. H.Cliff.* 440. Roman Nettle.—It has seed much like lin-seed, only a little smaller and darker-coloured, and tasting like the former. It grows in several places of England; flowering in June and July.

It is ἀκαλυσή in *Theophr.* 7. hist. 7. & *Dioscor.* l. 4. c. 94. p. 281. *Urtica, Plin.* l. 21. c. 15. & l. 22. c. 13 & 14.

. S E C T.

S E C T. II.

The seeds are reckoned emollient and diuretic; called pectoral and vulnerary; and commended in the gravel, cough, consumption, and hæmorrhages. The leaves and roots of the first are said to purify the blood; and to be proper in the scurvy, internal ulcers, obstructions in the viscera, &c. They may be used in decoction, or infusion like tea; and the seeds in emulsions.

“*Officin.* Urticæ maximæ radix, semen, folia; minoris herba; Romanæ semen. *Vires.* Urtica omnis calfacit moderate, & siccat 2. partium tenuium est, aperit, incidit, abstergit, emollit, diuretica est & lithontripica, peculiariterque cicutæ adversatur & hyoscyamo. Radix (Urticæ maximæ) commendatur maximopere ad icterum. Herbæ usus in gangræna (decocta & propinata). Eadem in olera sumpta solvit alvum, abstergit renes, calculos expellit, expectorationem, morbillorumque eruptionem promovet. Semen (Romanæ) usus crebri est in pulmonum affectibus, asthmate, tussi contumaci, pleuritide, peripneumonia. Extrinsecus reprimat Urtica uvam inflammata (in gargaris.) Sedat hæmorrhagiam narium (Urtica minor. *scil.* contusa, vel & succus ejus expressus naribus inditus;) gangrænam mundificat. *N. 1.* Noverunt & chirurgi urentis Urticæ fricatu sanguinem allicere, adeoque atrophie subvenire. *N. 2.* Prurigini ab Urtica introductæ medetur oleum olivarum.” *Schrod.* 704.

1. These are not acrid, scarcely astringent in any part, but somewhat detergent; and the seeds oily. “Urticæ maximæ semina saporis subacris & tenuis: Romanæ saporis subacris, pinguis, cum quadam tenuitate.” *Herm. Cyn.* p. 315. “The leaves of these (three) nettles are of an insipid glutinous taste, and do not redden the blue paper; the roots redden it but little. They are also insipid, but a little styptic. . . By a chymical analysis there are got from nettles some volatile salt, much sulphur and earth, with several liquors which give greater indication of an acrid salt than of an acid. Hence detergent, diuretic, &c.” *T. Hist.* p. 375. Yet it seems to have been more used as an astringent inwardly than any other way. For—2. Dioscorides commends the Urticæ ut. for bites of dogs, foul ulcers, gangrenes, tumors, spleen, bleeding of the nose, procidentia uteri, &c. *N. B.* Folia trita, &c. outwardly: and as laxative, pectoral, and menagogue, inwardly. “Semen autem expansum potum Venerem stimulat, vulvamque aperit: cum melle de linctum orthopnææ, pleuritidi, peripneumoniæque prodest; thoracem purgat.” *Dioscorid.* l. 4. c. 94. p. 281. Yet the moderns seem most to value it in hæmorrhages, as in hæmoptoes, too great flux of blood from the piles, (vid. *R. H.*) dysentery, fluor albus, vomiting or pissing of blood, &c. although they commend it also in the jaundice, obstructions of the menses, irregular gout, contractions of the nerves, &c. (vid. *T. Herm. Boecler.* &c.)—*Verbo*, it is too much commended in too many diseases to let us know what it is really good for.

“Nunc si velis manus simul atque faciem teneram albamque efficere cape, authore Fallopio, Urticæ folia et radices: decoque in aqua, iisque manus faciemque ablue; tum pulchram reddes albam, tenellamque. Urticæ radicibus derafo cortice virente utuntur chymici ad purificandam aquam vitæ, imponuntque eas in cucurbitam cum secundò distillant.” *J. B.* iii. 447. “Ra-

“dices:

“dices Urticæ majoris, si coquantur copiosius, rei immixtæ luteum colorem conciliant, quas & vulgus in ovis colore imbuendis adhibet; veluti eadem purpureo tingit colore per radices falicis rotundifoliæ.” *Hoffm. in Schrod. Mang.* p. 504. “Novimus juveni cuidam ab adultera & lasciva meretrice, semen Urticæ propinatum, quo tardior aliàs ad actum Venereum excitaretur. Unde *Juvenalis* irritamentum *Veneris languentis*, & acres Urticæ.” *J. B.* l. c. “Semen-Urticæ. . . Venerem exstimulare, inter medicos convenit; unde a meretricibus amasiis suis propinari solet.” *R. H.* 161. I doubt of its having any such effect. See the structure of the spinulæ in *Hooke's Micrographia*, p. 142. However others assert, that they are not perforate at the extremity, that they contain no liquid, and that no juice in the nettles is acrid. *vid. Christ. Langius de Morbillis* as quoted by *Boeckl. in Herm. Cyn.* p. 317. *Vel fac experimentum, cum vacat.*

Of GUMS, ROSINS, RESINOUS GUMS, and CONCRETED JUICES.

I. Of G U M S.

L E C T U R E LXXI.

G U M M I.

S E C T. I.

G U M M I, Gummi Arabicum. *offic.* Gummi Arabicum. *B. P.* 498. *R. H.* 977. Gummi Arabicum sive Acaciæ. *J. B.* i. 2, 431. Gummi, G. Arabicum, Gummi Babylonicum, Gummi Saracenicum, G. Acanthinum. *Schrod.* 710. Gum Arabic.—This is a white (pale, or reddish) transparent gum, without taste or smell, which easily dissolves in water. It issues from the Acacia vera. *J. B.* i. 2, 429. *T.* 605. *R. H.* 976. Acacia foliis Scorpioidis leguminosæ, *B.* 392. Acacia. *Dod.* 752. Acacia Ægyptica. *Lugd.* 160. Acacia Dioscoridis. *Ger.* 1330. Acacia vera sive spina Ægyptica. *Park.* 1547. Spina Acaciæ. *Lob.* 536. Mimosa spinis geminatis, distinctis; foliis duplicatopinnatis, partialibus utrinque duobus. *H. Cliff.* 208. Acanthus Theophrasti. *R. H.* 976. The Egyptian Thorn, or true Acacia.

It grows in Egypt, Arabia, &c. Matthioli and others think we have not the Gummi Acaciæ; but Alpinus (*de Pl. Æg.* p. 12.) and Bellonius, better judges, assure us, that all the gum which comes from Ægypt is from that shrub, there being no other gummosæ arbores in that country (Are there not peaches there?) And the prickles, siliquæ, semina, &c. found amongst it confirm their opinion. “From Sayde and Alexandria were annually imported of gum to Marseilles from 5 to 600 quintals.” *Savary's Diæ.* iii. 503.

“Præfertur gummi vermiculatum, vitrum referens, pellucidum, ligni expers: proximum est candidum: resinofum vero, ac sordidum, inutile.” *Dioscor.* l. i. c. 133. p. 68. “Uno verbo, dico me vidisse gummas Acatia-
“rum,

“rum, figura atque colore, plerasque cerasorum, prunorumve gummas haud
 “dissimiles.” *Alp.* l. c. How are they then to be distinguished? “Adulter-
 “ratur admixtione gum. cerasorum, &c. quod cognoscitur solutione in aqua,
 “qua sincerum liquidissime & limpidissime solvitur, adulteratum non item.”
Schrod. 710. As for the figure it is accidental, and various, as well as the
 colour. vid. *J. B.* whose description Geoffroy copies without naming him.
 From this tree we have also the true Acacia, *i. e.*

Acacia, Acacia vera, Succus Acaciæ. *offic.* Succus Acaciæ. *B. P.* 496.—
 which is a solid, blackish inspissated juice, somewhat reddish within, of an
 astringent taste. It is expressed from the unripe fruit or pods, well beaten
 in a mortar, and evaporated by a gentle heat to a proper consistence; then poured
 on a clean cloth; and, when pretty cold, put up in bladders, in which it comes
 to Europe. What is made of the leaves is not so good. vid. *Alpin. Pl. Æg.*
p. 9. & *Vesling in Alp.* p. 6.

“Acacia, ἀκασία Dioscoridi, l. 1. c. 133. & Græcis ab ἀκάζω, acuo; unde
 “Acacia quasi acuta: quam Theophrasti, l. 4. hist. 3. ἀκανθον, *i. e.* spinam,
 “five ἀκανθον ἀγρυπτιαν 9. hist. 1. esse volunt.” *B. P.* 391.

S E C T. II.

The gum is antacid, lubricates and incrassates; called pectoral; and com-
 mended in coughs, hoarseness, heat of urine, and all diseases from acrimony,
 or irritation, *interne & externe.*

The juice is astringent, and commended in fluxes and hæmorrhages, and
 wherever styptic medicines are proper, internally or externally.

“Gum Arabicum calfacit & humectat 1. inspissat, poros cutis obstruit,
 “acrimoniam medicamentorum obtundit, asperitati asperæ arteriæ ac tussi
 “confert, ocularibus medicamentis & arteriacis commodissime adhibetur: &
 “contra dysenteriam. *Præp.* 1. Pulvis: N. ut bene pulveretur calfiant mor-
 “tarium ac pila. 2. Depuratum solvitur in aqua, colatur ac inspissatur.”
Schrod. 710.

1. It is a pure gum, free from all acrimony. “Medicamentorumque, says
 “Dioscorides, acrium quibus admiscetur vires hebetans,” dissolving intirely
 in water; crackling and splitting in the fire; and then flaming briskly. — 2.
 “Analyti chymica gum. Arabici electi lbij. exhibuerunt phlegmatis inodori,
 “saporis expertis, & limpidi ℥iij. 3v; acidi & rufescentis ℥x. 5iij. gr. liv; li-
 “quoris alcali ℥j. 5viß. (*i. e.* humorum ℥xv. 5vj. gr. xviii.) olei ℥j. 5v.
 “gr. xxiv. carbonis 3vij. 3vj; unde cinerum ℥j. 3ß, ac inde salis fixi alcali
 “3iiiß.” according to *Geoff.* ii. 575. He omits the jactura, which must have
 been 3vj. 3vj. gr. xxx: & terræ 3v. Here is a large proportion of oil and
 fixed salt. “Gum. Arabicum igne in carbonem convertitur, non flammam
 “concipit. (vid. *Lewis's Pharm.* p. 9. where he implicitly copies this error,
 “without naming the author). Unde liquet compositum esse ex sale falso,
 “cum oleo crasso, & terræ portione non mediocri conjuncto.” *Geoff.* ibid.
 But it does flame in the fire. I threw into a red hot crucible gum. Arabici
 grum. 3ij. gr. ij: it soon began to flame, and continued flaming for above
 twenty-four minutes. — 3. It is commended for the hæmoptoe, phthisis,
 mictus cruentus, vomitings, fluxes, sore eyes, &c. wherever acrimony offends.

And.

And the same may be said of gummi prunorum, cerasorum, persicorum, and the like.

“Acacia vera refrigerat, siccatur, crassarum partium est, incrassatur, astringit.
“N. 1. Succus hic cum rarus sit, substituitur ut plurimum Acacia Germanica.
“N. 2. Dat & aliam Acaciæ speciem arbuscula quæ gummi Arabicum profert,
“sed minus usitatam.” *Schrod.* 524.

It is of a rough and somewhat acidulous taste: and strongly astringent, as appears by every experiment made with it. It is used in Egypt in dressing and dying leather, (vid. *J. B.*) as well as in medicine. “Constat ex medio-
“cri salis acidi portione, paululum salis alcali, terra astringente copiosa &
“oleo tum tenui, tum spisso plurimo: ex quibus conjunctis compositum ex-
“urgit salsum, aluminosum, mucaginosum.” *Geoff.* ii. 716. Who made the analysis? Mr. G. dreamed it. What does it explain? Nothing at all: Nothing here needs explication. How does it act then? Like an astringent. *Nugæ!* What a vast difference is there between the Acacia and gum Arabic, though produced by the same tree?

S E C T. III.

Either may be given to ʒj. or ʒij. The gum is an ingredient in the emulsiō Arabica, pulvis diatragacanthi, diascordium, mithridatium, theriaca, & trochisci cardialgi: and the succus is used in the theriaca & mithridate.

T R A G A C A N T H A.

S E C T. I.

Tragacantha, gummi Tragacanthum. *offic.* Gummi Tragacanthum. *B. P.* 498. Gummi Tragacanthæ *Bellon.* Tragacantha gummi. *J. B.* i. 2, 408. Gum Tragacanth or gum Dragon.—This is a hard, rough, semipellucid, aqueous gum, or concreted mucilage, commonly in pieces twisted and curled up like worms, of different shapes, sizes, and colours; and of a mucilaginous insipid taste, and no smell; which issues from the root and trunk (*rather* branches) of the

Tragacantha Massiliensis. *J. B.* i. 2, 407. *T.* 417. *R. H.* 933. Tragacantha. *B. P.* 388. Tragacantha sive hirci spina. *Dod.* 751. Tragacantha sive spina hirci. *Ger.* 1328. Tragacantha vera. *Park.* 995. Tragacantha Massiliensis foliis incanis, perseverantibus, seu non deciduis, flore albo. *H. Ox.* ii. 113. Tragacantha. *H. Cliff.* 361. Goat's-Thorn.

It grows in South France, Italy, Sicily, &c. But the gum is brought from Turkey. “Imported at Marseilles annually from Aleppo, Smyrna, Sa-
“tahe, of gomme Dragan from 50 to 60 quintals; valued from 18 to 20 sols
“per pound.” *Savary's Dict.* iii. 503. Is its figure natural? So says *Mr. T.*
vid. *Voy.* i. p. 22. “Quale ad nos adfertur, est glutinosum caudidum, aut
“flavum, aut ex ruffo pallescens, contortum in erucarum, vermiculorumve
“formam, tanquam violentiore pressu per densius colum transmissum; sapore
“sub-

“subdulci, & fere fatuo, aquam, cui infunditur, in lentam sequacemque mucaginem convertens.” *J.B. vid. Savary's Dict.* i. 25.

“Tragacanthæ radix lata est & lignosa, ac supra terram etiam eminet: a qua furculi humiles, robusti, latissime fusi; & in ipsis foliola numerosa, tenuia, inter quæ aculei sese proferunt, quos ipsa occultant, candidi, firmi restique. Est & Tragacantha lachryma quæ super resecta radice concrevit: quo in genere præstat pellucens, lævis, gracilis, sincera ac subdulcis.” *Diosc.* l. 3. c. 23. p. 180.

S E C T. II.

It is as soft and antacid as gum Arabic, but much more mucilaginous, therefore more incrassating, and more efficacious in diseases from the thinness or acrimony of the liquids, or irritation of the solids.

“Refrigerat 2. (*aliis* temperata est) humectat 1. (*aliis* siccant) lenit, cutis spiracula obstruit, acrimoniam mitigat, incrassat. *Ufus præcip.* ad tussim inveteratam, ad fauces exasperatas, retusas voces, cæterasque destillationes (cum melle inde fit linctus, subditurve lingua ut liquecat) contra renum dolorem & vesicæ rosiones (in passo vel brodio), in dysenteria. Extrinsicus ad dysenteriam (in clysteribus) ad rubedinem & acres destillationes oculorum (soluta aqua rosarum vel lacte) ad palpebrarum scabritiem. Dosis ʒj. *Præp.* Species diatragacanth. calidæ & frigidæ.” *Schrod.* 750.

Gummi Arabici ʒj. will entirely dissolve in aquæ ʒj. or ij. without making it visibly ropy, or thickish: but Tragacanthæ ʒj. (notante *D. Quincy*, Pharm. p. 219.) will give aquæ lbj. the consistence of a syrup. “A dram will give a pint of water the consistence of a syrup, which a whole ounce of gum Arabic is scarce able to do.” *N. Disp.* p. 136. “Macerated in a small quantity of water, it forms a thick mucilaginous juice, which does not perfectly dissolve in a larger.” *Lewis's Pharm.* p. 68. e *Geoff.* ii. 580. *An recte?* — 2. “Analyti chimica ex Tragacanthi lbj. prodierunt phlegmatis limpidi, inodori, insipidi ʒij. ʒvij: humoris rufescentis, odore empyreumatico, sapore subacido, subamaro, quasi nucleorum persicorum, ʒx. gr. xlvij: humoris leviter rufescentis, tum acidi, tum alcali urinosi, ʒj. ʒij. gr. lx. (*i. e.* humorum ʒxv. ʒiijß:) olei ʒj. ʒij. gr. lvi. Carbo pendebat ʒvij: unde cinerum ʒj; ac inde salis fixi ʒij. gr. xxx. (ergo terræ ʒv. gr. xlij.) Jactura fuit ʒvij. ʒij. gr. lii.” *Geoff.* ii. 579. Hence it yields ʒiv. gr. liv. less humorum; ʒij. gr. xl. less olei; ʒj. gr. vj. less salis fixi; ʒij. more carbonis; and gr. xlij. less terræ than gum Arabic does.

S E C T. III.

It may be given to ʒj. which is enough at a time: the pulvis Diatragacanthi to ʒii. It is much used in troches, and is in troch. albi *rhafis*, bechici albi & nigri, diasulphuris, & de terra Japonica.

The dosis gummi Arabici is a ʒj. ad ʒij, & gummi Tragacanthi a ʒß. ad ʒij. according to *Mr. Geoffrey*. None of these aqueous gums dissolve either in spirits or in oils.

II. R O S I N S.

B A L S A M U M.

S E C T. I.

Balsamum, Balsamum Gileadenſe, Opobalsamum. *offic.* Balsamum Judaicum Gileadenſe, è Mecha, verum, Opobalsamum, Oleum Balsami, Balsamelæon. *offic. Dale* 282. Opobalsamum, Balsamelæon, Balsamum Judaicum, Gileadenſe, Syriacum, e Mecca, Constantinopolitanum, album. *offic. Geoff.* ii. 473. Balm of Gilead.—This is a liquid rosin, of a yellowish, or greenish-yellow colour, of a warm bitterish aromatic taste; acidulous and fragrant smell, resembling somewhat turpentine and citrons; brought from Turkey. The shrub which yields it is the

Balsamum Syriacum, Rutæ folio. *B. P.* 400. Balsamum, Balassan ab Ægyptiis vocatum. *Alp. Pl. Æg.* p. 48. B. Lentisci folio, Ægyptiacum. *Bellon. Obs.* l. 2. c. 39. p. 110. Bals. verum (Xylobalsamum, Carpobalsamum, Opobalsamum.) *J. B.* i. 298.—306. B. verum. *J. B. R. H.* 1755. Balsamum Alpini, *Ger.* 1528. Balsamum genuinum antiquorum. *Park.* 1528. Balsamum. *Vesling. in Alp.* p. 17. The true (natural) Balsam tree. It grows wild in Arabia, and there only, as Alpinus and Bellonius inform us; whence it came always to Judæa and Egypt, when cultivated in either of these countries. “Josephus etiam, Balsami plantam (inquit) cujus hodie ferax nostra regio est, reginam Sabæ in Judæam attulisse aiunt. Quo cum Strabone consentit.” *vid. R. H.* 1756. “Revera naturalis ejus locus & fuit & est hodie Arabia, non felix illa ad quam minus facile procurrimus, sed Pætrea, a Petra urbe ita dicta. Hinc in Palestina translata, longo ante Solomonis imperium tempore: duravit ibi usque ad Cleopatram, quæ consensu Herodis magni, in Ægyptum transtulit. Ibi ut hodie vivit, ita quoties hortulanorum incuria perit, restauratur ex dicta Arabia per Bassas Cairinos, beneficio illorum, qui singulis annis ad Sepulchrum Machometis peregrinantur.” *Hoffm.* 119. “Est bonus succus, qui recens est, validi odoris, sincerus, non subacidus, dilui facilis, levis, astringens, & linguam modice mordens. Sed varie vitatur. . . Maleficium vero facile deprehenditur. Siquidem sincerus lanæ vesti instillatus, si deinde eluatur, neque maculam facit, neque notam ullam relinquit: at vitiatus inhærescit. Rursumque purus lacti instillatus, id ipsum coagulat, id quod adulteratus non facit. Quin & sincerus lacti aut aquæ infusus, celeriter diffunditur, atque lactescit: at adulteratus olei modo innatat, in orbem circumagens, aut diffundens sese, stellæ in modum. At tamen sincerus etiam vetustate crassescens, seipso deterior evadit.” *Dioscor.* l. 1. c. 18. p. 17. All these marks, as explained by *Joan. Veslingius*, in his *opobalsami veteribus cogniti vindiciæ*, Patavii 1644. in 4to. sufficiently agree with those of the modern genuine Balsamum. He had frequent occasions particularly to examine this balsam, as it was sent every year from the Seriffus Arabum, in compliment to the viceroy of Egypt. “Resina erat (says he, p. 9.) liquida flavescens, pellucida, odore supra terebinthinam, eximiaeque suavitatis grata.”——But of all the marks of its goodness or sincerity, none seems

seems so much to be depended on as its celeris super aquam diffusio: for, if genuine and not too old, a single drop of it let fall on water, *e. g.* in a tea saucer celeri motu, immediately spreads, as it were dissolves and disappears; but, in half an hour or so, it becomes a transparent pellicle, covering the whole surface, and may be taken up intire with a pin, having lost both its fluidity and colour, and become white and soft, and cohering, and communicates its smell and taste to the water. This test all the balsam I saw in Holland bore; though it is rare to get any from London that answers it. The essential oil of Juniper spreads indeed on water, but never coheres into a pellicle. Whether art can imitate this quality I know not. “Inventi sunt a curiosis hominibus liquores, qui aquis infusi, lacteum candorem æmulari cernebantur.” *Vesling.* p. 21. But when he inquired of *Mustaphæ proregis Ægypti vicarius*, whether the opobalsamum, that came that year from Arabia, was altogether genuine and pure? he made the experiment before him (*vid.* p. 9.) which he afterwards more fully describes thus: “Itaque si cominus aquæ, aut lacti balsami gutta admoveatur, non mergitur; sed simul atque utrumvis contingit, in summo sese æquore diffundit ac dilatat. Ex alto si destilletur eadem, pondere suo abrepta, mergitur quidem; sed mox superficiem repetit, atque in eam se expandit, celeri motu, & tam expedito, ut nullus alius resinosus liquor. Nam momento quasi temporis diffunditur. Accedit huic celeri solutioni amplior dilatatio, cum vel unica gutta cyatho satis capaci aquam receptam tenui pellicula totam obvelet. . . Dissolutionem hanc excipit ejus condensatio. Nam simulatque in membranulam succus extensus est, non aureus amplius, non flavus, sed manifesto pallore decolor conspicitur. Tunc vero styli cuspidem recollecta gutta (nam colligi dissoluta integre potest) etiam evidentiore candore, lacteum succum exprimit.” *Vesling.* p. 30, 31. But whether the shops have any of the genuine pure balsam is doubted by some; though it is certain that a considerable quantity of a balsam is frequently brought from Mecca.

“Tantæ æstimationis est ut princeps Arabiæ felicitis, cui etiam Mecha paret, singulis annis, inter alia munera, tres, quatuorve ejus libras Turcarum imperatori, honorarii loco transmittat. Cayri itidem præfecto unam. Quin & ducibus peregrinis idem, ceu maximum honorarium præsentat.” *Schrod.* p. 711. *ex Alpini de Pl. Ægypt.* p. 53. “Est hic valde rarum & carum.” *Nucl. Belg.* p. 39. “Hodie, ex Aug. Lippi epistolis, tres sunt illius succi species. 1. Verum opobalsamum dici potest, & est pretiosus ille humor, vel sponte, vel ex vulneribus cortici inflictis dimanans: sed adeo exiguum est quod colligitur, ut pro indigenis & magnatibus vix sufficiat, rarissimeque foras deferatur. Altera 2. species est balsamum è Mecca seu Constantinopolitanum, pretiosum quidem, quodque raro ad nos pervenit, nisi per magnates quibus dono datur. Sic extrahitur. Arboris balsamiferæ ramusculis & foliis cacabum adimplent, illisque aquam affundunt, donec supernatet. Cum ebullire incipit, oleum limpidum ac tenue aquæ innatat, quod sedulo colligitur & ad mulierum usum reservatur: eo enim ad faciem expoliendam utuntur, capillosque inungendos. Perseverante autem ebullitione 3. Aliud oleum paulo crassius & minus odoratum ad aquæ superficiem elevatur, quod ut minus pretiosum per caravannos Caïrum & ad exterarum nationes transmittitur, illudque est in Europa vulgatius.” *Geoff.* ii. 476. That the

balsam got by coction may be mixed with the true tear is not improbable, since Vesslingius informs us that a considerable quantity of a coarser balsam is thus (*viz.* by coction) obtained; and that the shrub requires to be pruned annually, as well as vines: but since the balsam, only dropt on water, soon loses both its fluidity and colour, I do not see how it could retain either, if extracted by coction; far less how it should spread on water, as I have often seen it do: some of which I bought in Holland at the rate of thirty stivers an ounce, as I remember.

“Anno 1640, cum in sat magna copia Romam allatus esset succus, pharmacopœi quidam, consilio medicorum in urbe præcipuorum, theriacæ indiderunt. Reclamantibus cæteris adeo, ut ad summum pontificem res devolveretur tandem utriusque partis consensu, electus fuit tanquam judex honorarius Petrus Castellus, medicus Messanensis, qui edito scripto publico, pro affirmantibus pronuntiavit. Fecit idem paulo post Fanciscus Perla. Ad me quoque cum aliquid hujus balsami misisset Cl. Joh. Rhodius, quod aliquid mihi tribueret in hac medicinæ parte: putavi mei officii esse, in postcuris meis, conjungere me cum aientibus.” *Hoffman*, p. 119.

“Video studiosos linguarum orientalium consentire in eo, esse ab Hebraico Baal, sive Bel, qui est Belus Assyriorum rex, qui deificatus ab istis Jupiter est appellatus. Hinc Bel-semen, dominus remediorum.” *Hoffman* 119.

“Pura puta vox Hebraica esse videtur Βαλσαμον. Bal enim seu Baal dominum significat, *Samen* pinguedo, oleum, unguentum, quasi unguentorum princeps seu dominus.” *R.H.* 1755. Many treatises have been published on this substance, as by Fallopius, Lobelius, Alpinus, Stephanus de Casparis, Castellus, Perla, Vesslingius, Volkamerus, &c.

S E C T. II.

It is attenuant, antiseptic, diuretic, laxative, and vulnerary; called alexipharmic: and is commended inwardly in the asthma, cough, consumption, internal ulcers, putrid scurries, gonorrhœas, barrenness, &c. and outwardly for pains, wounds, ulcers, foulness of the skin, &c.

“Inter olea quævis & balsama omnium est laudatissimum, præstantissimum & toto orbe maxime celebratum, utpote quod vires habeat abigendis morbis tam internis quam externis nulli medicamento secundas. Confert febricitantibus, asthmaticis; jecoris obstructions solvit, menses movet, stomachi dolores sedat, phthificos juvat, appetitum excitat. *Vide* prolixius B. de Tolu, & Clusium in Monard: ut & Bellonium, ac Alpinum.” *Schrod.* p. 711.

1. It is remarkably aromatic, bitterish, acidulous, and more agreeable to the smell than to the taste, though it is not acrid. “Odoris est eximii imprimis atque acutissimi, terebinthum redolentis cum suaviore fragrantia; saporisque amari, acris, & adstringentis.” *R.H.* 1756. “Saporis acris, aromatici, odoris fragrantis.” *Herm. Cynof.* p. 673. *Dale* 282. “Odoris aromatici instar citri; saporis amaricantis, subacris, & aromatici.” *Nucl. Belg.* p. 39. “Odoris fragrantis, ad citri odorem accedentis, saporis acris, & aromatici.” *Geoff.* ii. 474. It seems to consist of an aromatic spirit, benign sulphur, and essential salt. “Opobalsamum recens collectum & distillatum
“oleum

“ oleum præbet tenue & fragrantissimum; & resina quædam rufescens remanet,
 “ quæ si igne urgeatur, olei crassioris, ad terebinthinæ oleum accedentis, por-
 “ tionem fundit, ac tandem oleum rufum, cum acidi liquoris guttis aliquot.
 “ Ab hoc oleo tenui & volatili ejus vis pendet.” *Geoff. ii. 477*; who distilled
 it recens collectum. However, the distillation of turpentine gives sufficient
 ground to believe the balsam would yield such principles; but probably much
 more than some drops of an acid liquor: and though the virtues peculiar to it
 do much depend on its proper spirit, which rises in the most volatile oil; yet
 by no means the virtues common to it with other balsams: its specific virtues
 even depend on this spirit only as it is mixed with the other principles in the
 natural state of the balsam. — 2. Fixed or volatile alcalies dissolve it, and
 render it saponaceous and detergent, as it blunts or destroys their acrimony:
 yea some soft animal substances, as yolks of eggs, have almost the same effect,
 and make it mix with water: spirits also dissolve it. Hence on a triple ac-
 count it is antiseptic, as sulphureous, aromatic, and acescent: and—3. In fact
 it is found by experience to prevent putrefaction. It is commonly known
 that the ancient Egyptians embalmed their dead, so as to preserve them from
 corruption some thousand years, by aromatics and balsams; whence the name
 Balsamatio. It was probably the fœtor of the carcases that first gave rise to
 the use of these substances; and their effects on the dead soon recommended
 their application to the living. Jacob was embalmed in Egypt more than
 3400 years ago: how long it was a practice before cannot be determined.
 Balsams therefore are probably among the most ancient remedies; and the
 name sounds softer and more agreeably, even in the ears of the most delicate,
 than that of any other class of medicines to this day; and will continue so to do,
 as long as we retain a right notion of Balsam and Balsamic. Read *Fr. Hoffm.
 Dissert. Physico-Medicam. de Medicamentis Balsamicis. L. Bat. 1716. 8vo.* For a
 Balsam properly is a native liquid resin, of a fragrant comforting smell, very
 friendly to nature and wholesome; but an enemy to corruption. But what idea
 can one have of a Balsamic, when Mercurialis, Lamium, Fœnumgræcum,
 Eruca, Chelidonium, Auriculæ Indæ, Allium, Viscus, Sambucus, Oxylapa-
 thum, and a hundred such like, get that name? vid. *Quincy's Pharm. 62. &c.*
 —4. This Balsam, outwardly applied, is anodyne, discutient, maturating, de-
 detergent, and healing: hence of great use in soreness, excoriation, or ulceration
 of the primæ viæ: “ In specie laudatur in viscerum debilitate.” *Herm. Cyn.
 p. 673.* Besides, inwardly taken, it not only opens the belly, but is remark-
 ably diuretic, communicating its smell and taste and virtues to the urine itself;
 whereby that salt, acrid, putrid liquor is converted into a vulnerary liquid.
 Now since this and such like Balsams prevent putrefaction, correct saline, bil-
 ious, rancid, and purulent acrimony; increase the fluid secretions, and are of a
 sulphureous and healing nature, they must not only contribute to the flexibility
 of the nervous fibres, but also augment their toughness and cohesion of their
 constituent parts, as well as hinder the degenerating of the fluids; that is, in-
 vigoiate the tone of the fibres, vasa, and viscera. Hence Balsamics may be
 of use, both for too rigid and too lax fibres, and consequently in many diseases.
 “ Dicimus Balsamica esse vere universalia seu polychresta medicamenta, quo-
 “ rum tanta vis est, quanta in ullo alio auxiliorum genere animadvertitur,
 “ quoniam omnibus fere naturis quadrant. . . Neque minus vincendis morbis

“ fere omnibus aptissima sunt præsidia. Naturæ enim humanæ sunt admodum
 “ amica, cum ea quasi conspirant, atque affinitatem habent. . . Quod in nobis
 “ vitam præstat, quod cordi, arteriis, & nervis, robur, pulsum ac tonum af-
 “ fert, principium (sive spiritum, sive animam, aut naturam, aut aliud quid
 “ appellare velimus) mirifice erigunt, excitant, conservant, constituunt.”
Fred. Hoffman, l. c. “ In phthisica diathesi sæpe conducit, fibrillarum pul-
 “ monarium tonum restituendo, & feri in pulmones exudantis acrimoniam
 “ temperando, viscidosque humores incidendo: quare asthmaticis quoque con-
 “ venit.” *Geoff.* ii. 478.

The Balsamum is almost a panacea in Egypt, and commonly used for all sorts of wounds, ulcers, venomous bites, poisons, plague, putrid fevers, convulsions, vertigo, epilepsy, palsy, cough, asthma, cold stomachs, obstructions, fluor albus, sterility, flatulent and nephritic pains, stone, &c. “ Oculis visum deperditum, atque auribus auditum, instillatum restituit.” For which purposes it is also commended by the ancients. See Dioscorides. N. B. In Egypt they have even a way of embalming women alive. Vid. *Alpin. Pl. Egypt.* p. 56—59.

S E C T. III.

It may be given to ʒj; but ʒj. is enough at a time. It should be an ingredient in the Mithridatium and Theriaca; but the Balsamum Peruvianum is used as its succedaneum here; and oleum nucis moschatæ expressum at London.

Sydenham gave gut. xxv. in the gonorrhœa. The dose in Lemery is gut. iv; in Albin. MS. ʒj; in Geoff. a gut. vi. ad ʒß; in Egypt to ʒj. It may be dropt on sugar; taken in a soft egg; or dissolved in the yolk of an egg, and mixed with any liquid,

As for the Carpobalsamum and Xylobalsamum; as their virtues depend on the balsam they contain, if genuine and fresh, so when they are old they are little worth: but being never used here, they are never brought home. What I shew I had from Holland, but cannot say they are genuine. In the Trochisci Hedychroi, the Agallochum is taken for the Xylobalsamum; and the Cubebæ for the Carpobalsamum in the Mithridatium and Theriaca of our Dispensatory.

L E C T U R E LXXII.

B A L S A M U M C O P A I B Æ.

S E C T. I.

Balsamum Copaiba, Copaiva, vel Capivi. *offic.* Balsamum Copaiva. *Pb.* *Lond.* p. 5. Copaiba. *Pis.* 56. *Marggr.* 130. Balsamum certarum quarundam plantarum quas Copaibas vocant. *J. B.* i. 306. Arbor Balsamifera Brasiliensis, fructu monospermo. *R. H.* 1759. Capivus. *offic.* The White American Balsam-tree. *Dale* 337. Balsamum Brasiliense, Balsamum Oleum-

ve Copaiba, Copaiva, vel Copaii. *offic. Geoff.* ii. 485. Balsam Capivi.—This is a clear yellowish-white liquid rosin, of the consistence of sweet oil when recent, for in time it turns as thick as Venice Turpentine: it is of a bitter nauseous taste, somewhat aromatic, and fragrant smell. *vid. N.B. infra.*

It flows in great plenty from a large Brazilian tree (arbor Balsamifera Brasilensis fructu monospermo. *R. H.* 1759.) wounded or bored to the pith. “Pinguis & odoriferus ille liquor, quo vasta hæc arbor abundat, ab inciso cortice ad medullam usque luna plena, tanta quantitate distillat; ut spatio trium horarum ad lbxij. effundat.” *Piso* 56. *Marcgrave* says much the same, p. 131. “Circa arboris caudicem terebrâ ad medullam usque perfoditur; and thus it gives “Oleum seu Balsamum limpidissimum, instar olei Terebinthinæ destillati consistentia & sapore, odoris resinosi, &c.” There is some account of this tree in *Joan. Baptista Labat’s Voyage aux Isles de l’Amerique* (Paris, 1722. in 12mo. vol. 7.) vol. 2. cap. 17. which I have not seen.

“Balsamum Copaiba probatur hoc modo. Gutta ejus acu deprompta immittitur aquæ frigidæ, & si illa fundum petit non dissoluta; vel in medio aquæ hærens retinet figuram suam, genuinum bonumque est balsamum: contra vero si illa gutta se extendit, solvitur, vel manet in superficie aquæ, notatur adulteratum. N. B. Est consistentiæ Terebinthinæ Laricæ; si liquidius admixtum habet aliquod oleum. Per ætatem evadit spissius, & coloris magis ab albo recedentis, non vero siccum ac durum fit.” *Rieger Introd.* ii. 63. I dropt this Balsam, as well as the Peruvian, from a little height; they sunk to the bottom, and each remained there in form of a round drop: but if the drop has little or no fall, it swims upon the water.

S E C T. II.

It is antiseptic, diuretic, and purgative, agreeing in some things with the Balsamum; but more purgative, and not so subtile, nor so agreeably aromatic: and is commended and much used in coughs, consumptions, internal ulcers, nephritic pains, gonorrhœas, fluor albus, &c.

“Calidum est in 2. crassum, valdeque pingue & resinofum. Pectori ad stomachum languidum, ventri ad colicos frigidos cruciatus, illitum conducit: guttulæ aliquot exhibitæ per os, robur addunt visceribus, illisque tonum reddunt: fluxiones muliebres, cursus ventris, & gonorrhœas quoque sistunt, &c.” *Piso*, p. 57. “Nervis apprimè amicum est: guttulæ iij. vel iv. in ovo forbili, bis vel ter mane sumptæ, dysenteriam, vel alios fluxus ventris, sistunt & curant. Calidum & siccum est in 2° gradu.” *Marcgr.* p. 131.

1. It is a pure balsam, of a lasting and disagreeable bitter taste, and aromatic smell, though not so pleasant as the former. “Saporis acrisculi, amaricantis, aromatici; odoris fragrantis. In fluore albo & gonorrhœa est specificum.” *Herm. Cyn.* 671. “Saporis acris, amari, aromatici; odoris fragrantis.” *Dale* 337. ad ligni Calambourg dicti odorem accedentis.” addit *Geoff.* ii. 485. “Odoris fortis resinosi, & saporis amaricantis, calidi, & acris.” *Nucl. Belg.* 37. — 2. “Ejus lbj. destillatione dat olei ætherei 3vj. saporis & odoris valde penetrantis & jucundi, coloris viridantis, formæ paulo con-

“sisten-

“*littentioris.*” vid. *Rieger*. l. c. and *Geoff.* ii. 487. “Distilled in a strong heat, without addition, it yields a blue oil.” *N. Disp.* p. 91. “*Hujus arboris lignum, ob elegantem colorem, saturatè-rubrum, a fabris lignariis expetitur tum ad asseres latos conficiendos, tum etiam ad varia opera elegantiora concinnanda; necnon ad tinctorios usus, usurpatur.*” *Geoff.* l. c. — 3. *Dr. Fuller* observes, that it does not make the urine smell of violets; but communicates to it its bitter taste. “*Sapore donatur amaro, acri, terebinthinaceo, admodum penetranti & in ore durabili: atque licet videatur esse quædam terebinthinæ species, urinam tamen odore violaceo minime inficit, illam vero sapore manifeste amaro (intense amaro, Geoff.) imbuit; ejusque & feri sanguinis, & sativæ muriaticæ falsedinem mirifice delet.*” vid. *Misturam balsamicam, & mist. bals. nephriticam, in Fulleri pharm. extemp.* where it is commended in sanguinis cachexiâ scorbuticâ, rancidâ & putredinali; for ulcers, the palsy, arthritis, obstructions and heat of urine, “*novi quendam chylum pro lotio excernentem, hujus beneficio integre sanitati restitutum;*” for coughs, tubercles in the lungs, “*atque licet intense amarum sit, & manifeste calidum, hæcticis tamen optime convenire notavi, &c.*” Thus *Fuller*, perhaps somewhat hyperbolically: but certain it is that, not like many new medicines, this Balsam is more used, as well as commended, now, than when it came first to Europe. He observes also, that if *zij.* or *zïij.* be taken for a dose, sub forma potionis albæ, it will purge as well as turpentine. But I have observed this effect, when no more than *ʒj.* was thus taken. — 4. “*Omnes eo diu utentes appetitu profecto laborant.*” *Albin. MS.* But this is no objection against its virtues, or use; only a caution as to the dose.

S E C T. III.

It may be given to *ʒj.* in a soft egg, sugar, pills, or, sub forma emulsionis, dissolved in the yolk of an egg and diluted *Dr. Fuller's* way. It is used in the *tinctura balsamica & cantharidum, pilulæ pacificæ & scilliticæ.*

“*Datur ad ʒj. Herman; ad gut. xxx. Albin. MSS; ad gut. xxiv.*” *Lemery.* *Fuller* gives a spoonful of his mixture twice a day, which contains *bals. gr. x. or xij.* “*Exhibetur a gut. v. ad xv. vel xx.*” *Geoff.* ii. 488. *N.* “*I have found it to yield sometimes, upon distilling it with water, more than half of its weight of a clear colourless essential oil, &c.*” *Lewis's Pharm.* p. 12. *N. Disp.* l. c.

B. P E R U V I A N U M.

S E C T. I.

Balsamum Peruvianum, Balsamum Judaicum. offic. Balsamum Indicum ex arbore punica malo majore, Xylo dicta, foliis urticæ. B. P. 401. Balsamum Monard. Clus. Exct. 302. Balsamum Peruvianum. Park. 1570. Balsamum ex Peru. J. B. i. 295. R. H. 1757. Cabureiba. Pison. 57. Cabui-Iba Marcgr. 137. Balsam of Peru.—This is a liquid rosin, of the consistence of Venice Turpentine, or liquid honey, of a reddish-black colour; of a warm, sub-

subacid, and aromatic taste; and fragrant sweet smell, like benzoin and storax.

The tree whence it is got grows in Peru and New Spain. “Ramos atque etiam truncos arboris, assulatum & minutim concisos in lebetem amplissimum injiciunt, multa desuper affusa aqua: bulliunt omnia & fervent quantum satis esse putant: igne sublato frigescere sinunt, & conchyliis oleum supernatans colligunt. Id vero est quod in has regiones invehitur, & quo vulgò utimur, colore ex nigro rubente, odoris suavissimi.” *Monardes*, l. c. & *Geoff.* ii. 483. only abridges him unnamed. But it appears to be heavier than water, and so will fall to the bottom. The balsam which this tree yields by incision is white and more fluid, but rarely found in Europe, and never in the shops. This balsam was among the first of the American simples which came to Europe; and sold at first for twenty ducats the ounce: but in Monardes’s day a pound might have been got for three or four ducats. He even says, “Romam primum delati uncia, centum ducatis venit: postea, tantâ quantitate illatâ, vilescere cœpit, & etiam gratis quodammodo dari, ut solet in rerum abundantia sive raritate plerumque contingere. Nam cum magno veniret, omnes ejus virtutes admirabantur atque requirebant: postquam vero imminutum est pretium non æstimatur, cum tamen idem Balsamum sit quod fuit, cum centum ducatis uncia venderetur.” *Monard. Clus. Exot.* p. 303.

S E C T. II.

It is hotter and more agreeably aromatic than Capivi; reckoned more nervine and diaphoretic, and to be the best succedaneum for the Balsamum Verum. It is called analeptic, pectoral, and stomachic; and commended for the asthma, consumption, palsy, colic, hysteric passion, sterility, &c. and outwardly for fixed pains, cramps, contusions, ulcers, &c.

“Calfacit & siccat 2. discutit, emollit, subastringit. *Usus præcip.* in asthma, phthisi, nephritico dolore, mensibus obstructis, ventriculi debilitate ac dolore, epate obstructo, utero squalido, atque inde ad concipiendum inepto; suffocatione ex utero, &c. Extrinsecus lenit dolores ex humoribus frigidis ortos, discutit humores aqueos, roborat caput ac nervosas partes, contractionesque sanat, ventriculi flatus discutit, cruditates tollit, lienem durum emollit, nephriticum dolorem mitigat, urinam remoratam promovet, arthriticis doloribus summe confert: in chirurgia proficuum est vulneribus recentibus, tum consolidando, tum noxia discutiendo, inveteratisque; necnon & nervorum prodest contusionibus febricitantibus (spinam ante paroxysmum inungendo atque cum vino guttulas aliquot exhibendo, idque iteratis vicibus). Dosis gr. iv. v. vj. N. Tantæ censetur efficacæ, ut sint qui Opop balsamo substituere non verentur. Nic. Monard. *Præp.* Spiritus ac oleum stillat.” *Schrod.* p. 713.

1. It is pretty hot to the taste, scarcely acrid, or bitterish; and extremely odoriferous, a single drop of it being capable of perfuming a very large quantity of any substance. Dissolved in the yolk of an egg it is said to be more acrid to the taste than when undissolved. “Odor fragrantissimus styracis, ad benzoini suavitatem nonnihil accedens, & qui sua fragrantia totum adeo

“conclave perfundat, diuque perseverat; sapor subacris, linguam mordicans. “Flammam facile concipit, suaviterque olentem fumum spargit. Aquæ injectus mox fundum petit.” *J. B.* “Balsamum Peruvianum album est saporis acriusculi aliquantum amari; odoris fragrantis & grati: nigrum est saporis & odoris albo debilioris & ignobilioris.” *Herman. Cyn.* p. 668, 670. “Odoris fragrantis & grati, fere instar styracis, saporis subacris & calidi. “Bonum est, si in charta non facile fluat, nec rubrum in ea appareat.” *Nucl. Belg.* 38. “Saporis subacris & mordicans; odor fragrantissimus.” *Dale* 337. “Balsamum Peruvianum album est saporis acriusculi, aliquantum amari; odoris fragrantis & suavis, ad styracem accedentis: nigrum odoris fragrantissimi, benzoinum suaviter referentis; saporis subacris, linguam leviter mordicantis.” *Geoff.* ii. 482. “Cum vitello ovi solutum, longe acrius fit, observante Etmullero, & magis fauces vellicat, quam per se sumptum.” *Ibid.* p. 484. It is said also—2. to yield little (if any) æthereal oil by distillation. “Balsami Peruv. albi oleum destillatum statim concrevit in salem instar sacchari, candidum velut camphora.” *Herm. Cyn.* p. 670. “The dark-brown balsam of Peru, distilled with water, yields a small quantity of very fragrant oil.” *Lewis’s Pharm.* p. 12. “Bals. Peruv. nigri ꝑꝑ. cum aqua per vesicam destillatum, vix ꝑꝑ. dat olei fragrantissimi rubri, omnis empyreumatis expertis.” *Rieger Introd.* ii. 77. It is not to be wondered at that it yields little essential oil, since it is got by coction. “It does not unite with water, milk, expressed oils, animal fats, or wax: it may be mingled in the cold with this last: but if the mixture be liquified by heat, the balsam separates and falls to the bottom.” *New Disp.* p. 92. “Concretum, ut inquit Etmullerus, anomalum est, quia neque cum aqueis, neque oleosis, neque volatilibus intime miscetur; &c.” *Boeckl. in Herm. Cyn.* p. 669.—3. It is much commended as vulnerary, interne, externe; and wherever the Opobalsamum is proper. Among other things, “Juventam conservat; (says Monardes, and adds) magnæ exstimationis vir mihi probæ notus, ab ejus usu nullos dolores sensit, & tamen senex, tam validus est ut juvenis videatur.”

S E C T. III.

It may be given to ʒj. It is an ingredient in the Balsamum Locatelli, tinctura balsamica, elixir polychrestum, mithridatium & theriaca (loco opobalsami) balsamum ad apoplecticos, balsamumque traumaticum.

“In ovi vitello solutum datur a gr. v. ad ʒss.” *Herm. Cyn.* 668. “Sumitur ad gut. x.” *Albin. MS.* “Exhibetur a gut. iv. ad xij.” *Geoff.* ii. 483. Sydenham gave gut. x. thrice a day in consumptive coughs.

B. T O L U T A N U M.

S E C T. I.

Balsamum Tolutanum. *offic.* Balsamum Tolutanum foliis ceratiæ similibus, quod candidum est. *B. P.* 401. Balsamum de Tolu. *Monard. Clus. Exot.* 304. *Park.*

Park. 1570. *J. B.* i. 296. *R. H.* 1758. Balsam of Tolu.—This is of a solid but softish consistence, growing friable by age; of a yellowish red colour; of a soft aromatic resinous taste, and fragrant smell, somewhat like that of lemons. It is brought from Tolu in America in calabash shells.

“Nunc recens advehitur ex continentis quadam provincia, inter Carthaginem & nomen Dei sita, Tolu ab Indis appellata, Balsami quidam liquor, maximarum virium, præstantissimumque quod hætenus ex iis regionibus allatum sit, medicamentum. . . Colore rubro ad aureum tendente est, mediæ inter liquidum & densum consistentiæ, glutinosus admodum, & ubicunque reponatur firmiter adhærens, sapore dulci & grato, nec si sumatur nauseam movente, quemadmodum reliqua balsama, odore excellentissimo, & limonium fragrantiam quodammodo referente, sic ut ubicunque reponatur celari non possit, sed suo odore locum gratiorem reddat: etiam paucillum in vola manus attritum suavissimum spirat odorem, uti Jasmini fere.” *Monard. Clus. Exot* 304. He says it is got from a small tree wounded in the bark: but gives a very lame description of it.

S E C T. II.

It is the mildest and pleasantest of all the balsams, preferred to the Peruvian, yea equalled to the opobalsamum by some, and is much used in diseases of the lungs, internal ulcers, old gleets, fluor albus, &c.

“Antecellere videtur B. Peruviano, efficaxque est ad omnia ad quæ B. Ægyptiacum. Calfacit & siccatur, attenuat, resolvit, vulnerarium est, peccus expurgat, &c. *Ufus præcip.* in asthma, phthisi, in ventriculi cruditate & dolore. Extrinsecus in doloribus a causa frigida quibuscunque, & imprimis capitis, arthriticis & nephriticis, in defluxionibus ad oculos cohibendis, in paralyti, in ventriculi imbecillitate & dolore, ac inflatione (inunctum cum oleo nardino), in hydrope (illitum cum unguento aperitivo), in lienis imbecillitate, in tumoribus quibuscunque & œdematibus, in contractura; parotides insuper seu scrophulas cæcas curat. In primis autem celebratur in vulneribus consolidandis, defendendis, præsertim si ossa quoque sint fracta (quippe fragmenta expellit); in vulneribus articulorum, sectionibus nervorum, puncturis, contusionibus, &c. Dosis gr. iij. iv. &c. *Schrod.* 712.

Here is no acrimony, no nauseous stimulus, but an agreeable comforting smell: hence it is agreeable to such as can neither bear the perfume of the Peruvian balsam nor hateful taste of the Capivi. It is indeed of a thicker consistence, and more sticking, and so perhaps more difficultly digested; but sugar, yolk of an egg, or soft oil, will easily help that.

S E C T. III.

It may be given to ℥j. and more, safely. If Balsami p. i. be well rubbed with sacchari p. vj. vel viij. into a balsamo-saccharum, it will mix with any syrup. Our syrups balsamici ℥ij. contain only the tincture of balsam ʒj. that is

E c 2

gr.

gr. v. in ʒj. The *London* syrup retains only the proper aromatic spirit; which we value least, since much of it must fly off with the spirit of wine.

Schroder's dose is gr. iij. iv. &c. *Lemery* gives it to gut. iv; though he gives *B. Capivi* to gut. xxiv. I can see no danger in ʒj. if it be rightly dissolved by sugar, or the yolk of an egg. The *syrupus balsamicus* of our dispensatory, edit. 1735. could not answer because balsami & sacchari ana p. æ. were taken; so that there was by far too little sugar.

L I Q U I D A M B R A.

S E C T. I.

Liquidambra, Ambra liquida. *offic.* Liquidambar. *B. P.* 502. *Park.* 1590. *R. H.* 1848. Liquid-ambar & ejus oleum. *Monard. Clus. Exot.* 302. Liquidambar, resina arboris ocosol dictæ, foliis hederæ, odore styracis liquidæ. *J. B.* i. 2, 323. Liquid-amber:—which is a liquid rosin, about the consistence of Venice turpentine, of a more reddish yellow colour, of a hot aromatic taste, and fragrant smell, somewhat like that of storax.

It is brought from the West-Indies; but rarely to be met with in the shops. "It is rarely used, not being to be had in the shops." *Miller's Bot.* p. 273. It is got from a large tree in New Spain, Virginia, &c. which is supposed to be the

Arbor Virginiana, aceris folio; potius platanus Virginiana, styracen fundens. *R. H.* 1799. Item styrax aceris folio. *R. H.* 1681. Acer Virginianum odoratum. *H. L.* 641. Liquidambari arbor; seu styraciflua, aceris folio, fructu tribuloide, *i. e.* pericarpio orbiculari, ex quamplurimis apicibus coagmentato, semen recondens. *Pluken Phyt.* 42. *Alm.* 224. Liquidambar. *H. Cliff.* 486. *G. plant.* p. 463. vulgo the Liquid-amber tree.

"Sunt qui ex arboris ramis comminutis & coctis pinguedinem innatantem colligunt & vendunt pro legitimo oleo. Atque hic liquor a nonnullis storax liquida putatur in aromatariorum & pharmacopœorum officinis vulgo venalis. *Fran. Hernandez* oleum hoc ex arbore ipsa vel sponte, vel incisa exstillare ait." *R. H.* 1848. "Liquidambar olim magno erat in usu & in unguentariis officinis sæpius & magna copia reperiebatur. Nunc vero quandoquidem odora menta fere obsoleverunt, rarissime in officinis occurrit, ita ut iis sit prorsus ignotum. . . Liquidambar olim maxima copia ad pelles & chirothecas odoribus imbuendas absumebatur. Nunc vero apud nos odoramentum illud nomine vix cognoscitur. . . Hodie, sicut pleraque alia odora menta, obsolevit: ab his enim nostratum capita læduntur, gravantur, & mulieres in hystericos affectus inducuntur." *Geoff.* ii. 490, 1, 2.

S E C T. II.

It is a warm aromatic balsam, agreeing probably in virtues with the Peruvian; but used only outwardly, as anodyne, discutient, ripening, and farcotic, for pains, obstructions, tumors, &c.

"Calfacit

“Calfacit 2. (liquidior pars 3.) humectat 1. resolvit, obstructions expedit, emollit, maturat. *Ufus præcipui* in utero obstructo & indurato, tumoribus duris, &c. in suffitibus & similibus. N. adhibetur mechanice in perfumandis (ut aiunt) coriis, ac chirothecis. *Præp.* 1. Oleum, vel seorsim collectum, vel expressione a sicciore parte resinæ separatum. 2. Coctione ex ramis elicatum. Coquunt enim Indi ramulos in aqua, supernatantemque pinguedinem nomine olei colligunt.” *Schrod.* 724.

It is hot and aromatic, and smells somewhat like balsam of Peru and storax: it is said also to be somniferous. “Est saporis acris aromatici; odoris ad styracem accedentis: styraci respondet, &c.” *Herm. Cyn.* 672. “Saporis acris, aromatici; odoris fragrantis.” *Dale* 287. “Saporis mordacis & aromatici; odoris grati, fere accedentis ad odorem ambræ.” *Nucl. Belg.* 178. “Saporis acris, aromatici; odoris fragrantis, ad styracem & ambram accedentis.” *Geoff.* ii. 490. “Fr. Hernandez somni inducendi vim Liquidambaro & ejus oleo tribuit.” *R. H.*

T E R E B I N T H I N Æ.

S E C T. I.

1. Terebinthina Chia, Cypria vel vera. *offic.* Terebinthina vera. *B. P.* 500. The rosin of the Turpentine-tree—is clear, almost pellucid, liquid, but thicker and more tenacious than Venice Turpentine; of a yellowish colour, of an acrid, resinous, bitter taste; and fragrant smell. The tree that produces it is

Terebinthus vulgaris. *B. P.* 400. *T.* 579. *Terebinthus.* *Dod.* 870. *Ger.* 1433. *J. B.* i. 279. *R. H.* 1577. *T. angustiore folio, vulgator.* *Park.* 1526. *Pistacia, foliis impari-pinnatis, foliolis ovato-lanceolatis.* (mas & foemina) *H. Cliff.* 456. The Turpentine-tree.

It grows in the south of France, Spain, Italy, Cyprus, Scio, &c. flowering in April. “The best true Turpentine comes from the island of Chio: that from Cyprus is browner and fuller of dross.” *Miller’s Bot.* 433. “The Turpentine harvest in Scio is from about the end of July to October. The peasants make incisions with a hatchet across the trunks of the large trees, whence the Turpentine runs out, and falls on flat stones laid under them: from which they take it up with sticks, and let it drop into bottles.” *vid. T. Voy.* Let. 9. Vol. I. p. 145. He says this island furnishes no more than 300 oques, that is (an oque being generally 57 ounces, though some make it only 50) 1068½ lb. 12 ounces. But according to S. Carsueil there are imported to Marseilles, of fine Turpentine of Scio, from 15 to 20 quintals annually. *vid. Savary’s Dict.* iii. 507. “The Chio Turpentine is of a white colour, inclining to a green, clear, viscous, and of little smell. It ought to be chosen in consistence solid, almost without any taste and smell; and above all should stick little either to the fingers or teeth.” *Savary’s Dict.* ii. 1746. This is now but little used.

2. Terebinthina, Terebinthina Veneta, Resina Laricis. *offic.* Venice Turpentine is a liquid rosin, of the consistence of new honey, and very viscous; of a yellowish colour, of a warm bitter resinous taste, and fragrant smell; which flows from a tree wounded or bored to the heart. This tree is the

Larix.

Larix. *B. P.* 493. *Dod.* 868. *Ger.* 1365. *Park.* 1533. *R. H.* 1405. *Larix* folio deciduo, conifera. *J. B.* i. 2, 265. *Abies* foliis fasciculatis, obtusis. *H. Cliff.* 450. The Larch tree, or *Larix* tree.

The *Terebinthina Laricea*, as also the *Abugna*, even in Galen's day, were sold, by some, for the true Turpentine. This Venice Turpentine also is now seldom found in the shops, and is excluded the *London M. M.* But the *Terebinth. Argentoratensis* is retained; though perhaps neither of them commonly kept. The Turpentine which runs from incisions made in larches, firs, or pines, in the province of Forez in France, passes at Paris for the Venice Turpentine, according to *Savary's Diss.* ii. 1746. as probably the New England Turpentine does for the *Straßbourg* at London. "The Venice Turpentine" was formerly of great use in the shops, being of a browner colour and "thicker than the *Straßbourg*, and of a more resinous smell: but what goes now under that name is generally brought from New England. Whether produced from the fir or pine, or spruce trees, or from them all, is uncertain. The finest sort comes very near the Venice Turpentine, both in colour and consistence, as the more ordinary is like what is gotten from the pine." *Miller's Bot.* 433.

3. *Terebinthina Argentoratensis*, *Terebinthina Abiegna* seu *Abietina officin.* *Straßbourg* Turpentine.—"This is clearer, of a paler colour, and of a thinner consistence than Venice Turpentine; of a bitterish taste, and of a pleasant smell, a little like lemon-peel." *Miller's Bot.* p. 2. "*Lariceæ* consistentiâ similis, sed magis transparens, amaricans, valde fragrans, & sapore citrii mali corticem proxime referens." *Dale* 277. "Substantia est resinosa, liquida, dum recens est, *Lariceâ* pellucidior, minus lenta, minusque tenax, odore magis grata, & amara magis, corticis mali citrei odorem & saporem quodammodo referens: per tempus flavescit & spissescit." *Geoff.* ii. 505. He says that which is got from the tubercula *Abietum novellarum* is rare and dear. But *Straßburgh* Turpentine among the Germans is got by wounding the *Pinus*, *Piceæ*que in May, p. 507. And *Hoffman*, p. 292. observes, that some prefer the *Abiegna*, others the *Larigna*, and that *Matthiolus* says, "*Larignam* colatam, & ultimam claritatem perductam, vendunt pro *Abiegna*;" and that after a year it begins to turn yellow. "*Terebinthina Argentoratensis* a multis *Venetæ* præfertur, nec immerito, certe triplo pluris venit." *R. H.* 1403. Is this common in the London shops? or does New England Turpentine strained, &c. supply its place? However, the *Straßbourg* Turpentine ought to be the liquid rosin of the

Abies. offic. *Abies* conis sursum spectantibus, five mas. *B. P.* 505. *Abies. Clus. H.* 34. *Ger.* 1363. *Park.* 1539. *R. Syn.* 441. *Abies altera.* *Dod.* 866. *Abies foemina* sive *ἡλατη θηλεία*. *J. B.* i. 2, 231. *Abies Taxi* foliis. *R. H.* 1394. *Abies Taxi* folio, fructu sursum spectante. *T.* 585. *Abies* foliis solitariis, apice emarginalis. *H. Cliff.* 449. The Yew-leaved Fir-tree, or Silver Fir.—It grows in Sweden, Germany, &c.

4. *Terebinthina communis. offic.* Common Turpentine is thicker than the Venice, opaque and whitish, of the consistence of old honey; of a bitter, resinous disagreeable taste, and somewhat more strongly fragrant smell; which is or may be gotten from a variety of firs and pines, wherever they are common. But the tree which is said to yield most of it is the

Pinus

Pinus sylvestris, *Pinaster*. *offic.* *Dale* 277. *Pinus sylvestris*. *B. P.* 491. *Ger.* 1356. *R. H.* 1399. *Fl. Lap.* 273. *Pinus sylvestris*, vulgaris, *Genevensis*. *J. B.* i. 2, 253. *T.* 586. *Pinus sylvestris* sive *Pinaster*. *Dod.* 860. *Pinus foliis geminis*, primordialibus solitariis, glabris. *H. Cliff.* 450. The Wild or Mountain Pine.—“*Terebinthinam communem Pinus montanæ sc. sylvestris*, “*C. B.* liquorem esse existimo; siquidem a Massilia ad nos defertur; ipse “*autem* observavi non procul ab ea urbe montes hoc genus arborum sylvis “*vestitos*, earumque plurimas, deciso non longe a radice cortice, vulneratas “*ut resinam funderent*, eique excipiendæ fictilia truncis appensa aut subjecta.” *R. H.* 1403.

5. *Pix liquida*. *offic.* Tar—is a liquid rosin excocted from the trees by the force of fire, or a *Terebinthina semiambusta*, of a black colour, thick and coarse consistence, and of a bitterish resinous taste, and strong smell. “*Sed “ & picem meminisse debemus non aliud esse quam combustæ resinæ fluxum.*” *Plin.* l. 23. c. 1. p. 592.

It is brought from Sweden and Norway, and may be extracted from any resinous tree, by a kind of distillation per descensum. You have the process briefly in *Schroder* 735; also in *R. H.* 1396; *Savary's Diet.* 1160. vol. ii. and many others: even in *Theophr.* l. 9. hist. c. 3. p. 972. See also *R. H.* 1402. “*Pix liquida quam nonnulli καρον appellant*, e pinguisimis *Piceæ Pinique “ lignis colligitur.*” *Dioscor.* l. 1. c. 94. p. 52.

Pix ficca, *pix navalis*, *Pix offic.* is either the thicker subsiding part of tar, or the tar boiled down to a due consistence; which was called anciently also *Palimpissa*: but the *Pix navalis* or *Zopissa* was a different substance. “*Pix “ ficca e liquida decocta fit.* A nonnullis *Palimpissa* (q. *pix iterum cocta*) “*nominatur. . . Zopissam sunt qui nominent navibus derasam cum cera resi- “ nam*, quam nonnulli *Apochyma* vocant.” *Dioscor.* l. 1. c. 97, 98. p. 53. *Pisselæum*. *Dioscor.* l. 1. c. 95. p. 52.

Picea. *offic.* *Dale* 277. *Picea major*, prima; sive *Abies rubra*. *B. P.* 493. *Picea major*. *Ger.* 1454. *Picea vulgaris*. *Park.* 1538. *Picea Latinorum* sive *ελαινη ἀρβυνη*, *Abies mas Theophrasti*. *J. B.* i. 2, 238. *Abies*. *Dod.* 866. *A. mas Theophrasti*. *R. H.* 1396. *Syn.* 441. *A. tenuiore folio*, fructu deorsum inflexo. *T.* 585. *Abies*, foliis, solitariis, apice acuminatis. *H. Cliff.* 449. *A. foliis apice acuminatis*. *Fl. Lap.* 277. The Pitch tree, or Common Fir.

6. *Pix Burgundiaca* (& *Pix Græca*, sed malè) *offic.* Burgundy Pitch.—This is a softer kind of solid rosin, of a yellowish brown colour, of the taste and smell of Common Turpentine. It seems to differ from this Turpentine only in having some part of its ætherial oil separated by coction or distillation. *vid. Dale* 277. “*Ex resina candida liquata cum Terebinthina communi & “ oleo Terebinthinæ fit Pix lenta*, Burgundiaca dicta.” *Geoff.* ii. 510. *vid. Savary's Diet.* ii. 205. & 1160.

7. *Resina*, *Resina alba*, *Resina communis*. *offic.* Common White Rosin:—which is hard, friable, semipellucid, and of a dirty yellowish colour, tasting and smelling much like Turpentine.

“*Ex Piceæ resina præparata sunt*, 1. *Resina communis*. *offic.* (White “*Rosin*.) coctione in lebetæ cum aqua, dum ad consistentiam advenit. 2. *Pix “ liquida* *offic.* 3. *Pix*, siccaque *Pix*; & 4. *Pix Burgundiaca.*” *Dale* 277.

8. *Resina nigra*, *Colophonia*, *Pix Græca*. *offic.* *Colophonia officinarum*. *B. P.* 504. “*Colophonia Hispanica & Græca. Matth. Lugd.* *Colophonia*, “*Pix arida, quibusdam Pix Græca, Cord. hist.*” *B. P.* *Colophony* or black rosin—is very friable and blackish, but pretty transparent and red when looked through, of the taste and smell of the former. “*Ex Terebinthina communi conficitur oleum per destillationem cujus residuum, vel caput mortuum, Colophonia. offic. Colophony, or Black Rosin dicitur.*” *Dale* 278.

“From the common Turpentine is distilled the oil; the finer and more volatile part whereof, and what comes first, being called the spirit: what is left at the bottom of the still is the common Rosin; which if taken out before it be drawn too high, and then washed in water by a peculiar method, is what we call White or Yellow Rosin. The Black Rosin is the same more evaporated, and not washed at all.” *Miller’s Bot.* p. 347. The Black Rosin however is by much the more pellucid and cleaner. *Is it melted and strained?*

9. *Thus vulgare. offic.* “*Thus foemininum; Pini Resina. Mont. Ind. Exot. 11.*” *Dale* 278. Common Frankincense, or Par-rosin, is a solid, but softish Rosin, of a brownish yellow colour, and of the taste and smell of Turpentine. “*Pineam resinam esse affirmat Parkinsonus, in terram defluentem, & brevi indurescentem; cui & nos facile assentimur, quia ab eodem loco (Massilia) ad nos adfertur, nec aliæ sunt in vicinia arbores resiniferæ.*” *R. H.* p. 1403. “The Common Thus is reputed to be the native Rosin of the Wild Pine, or the *Resina Pini*, which is of a whitish-yellow colour (*ochroleuci, Dale*) whereof some pieces are fat, soft, and whitish, and others hard, brittle, and more yellow. There is but little of this to be got pure at present, being adulterated by common yellow Rosin, by some way that crafty knaves have found out.” *Miller’s Bot.* p. 347. But as Dr. Robinson suspects (*R. H.* 1403.) the common Frankincense may flow from the Pitch tree, and other resiniferous trees, as well as from the Wild Pine. For, in a word,

As different sorts of Rosins, as to colour and consistence, may be got from any of these resiniferous trees; so of Common Turpentine, by boiling or distilling it in water, may be made an ætherial spirit, oil, Burgundy Pitch, yellow and white or black Rosin, at least substances of the same consistence; perhaps also Strasbourg Turpentine, (as I have been very lately informed that at London they make Venice Turpentine of Common Rosin and Turpentine Oil. What length will such villany go, if the government continue to overlook it?) And by a dry heat also, or naked fire, Tar, Pitch, and Stone Pitch. From what species of trees therefore any of these substances come, which I shew you, if native; or how prepared, or compounded, if factitious, is not easy to determine.

Although *Colophonia*, among the moderns, is the same with *Resina nigra*; yet among the ancients it was a liquid Rosin brought from *Κολοφωνα*, a town of Ionia in Asia minor. “*Manat & Resina liquida tum e Pinu, tum e Picea. Hæ ex Gallia & Hetruria convehuntur. Quin & olim e Colophone asportabatur, quæ inde Colophonix cognomen sibi vendicavit. Itemque ex Gallia Sub-Alpina, quam incolæ nomine vernaculo Laricem appellant.*” *Dioscor.* l. 1. c. 92. p. 50.

“Attra-

“Atramentum illud fuliginosum, nostratibus lamp-black dictum, nil aliud est quam fuligo resinæ vel picis concremata, propter quod officinas ædificant, fumum eum non emittentes. Olim ad atramentum scriptorium in usu erat, & ad colorandum. Adulteratur fornacum, balinearumque fuligine. vid. *Plin.* l. 35. c. 6. *R.H.* 1403. See also *Dioscorides*, l. 1. c. 96. p. 52.

S E C T. II.

The true Venice Turpentine has all the virtues of *B. Capivi*; yea perhaps is not very much inferior to the *Opobalsamum*, being antiseptic, diuretic, purgative, and vulnerary. It is commended inwardly for coughs, internal ulcers, gonorrhœas, fluor albus, strangury, arthritic and nephritic pains, scurvy, &c. and outwardly for pains, wounds, and ulcers. The common Turpentine, and other Rosins, are of the same nature; but, because less pure, coarser, or more difficultly digested, are used almost only externally.

“*Terebinthina*, *Terebinthina vulgaris*, seu *Resina Laricis* calfacit, emollit, abstergit. *Usus præcipuus* intrinsecus in pulmonibus expurgandis, in gonorrhœa sistenda (cum aqua plantaginis ac succino): urinam ac alvum ciet. Extrinsecus chirurgis usitatissima est, fereque in emplastris omnibus adhibetur, movet enim pus, maturat, scabiei cutis medetur. N. sunt qui *Terebinthinam* in cerevisia infundunt, atque simul defervere sinunt pro potu ordinario in præservatione calculi, viscerumque obstructionibus. *Præp.* 1. Spiritus, calfacit, siccatur, attenuat, urinam ciet, tartaream mucilaginem resolvit. Hinc confert in tussi, aliisque pulmonum affectibus tartareis, in lienis & uteri obstructione, in calculo renum & vesicæ, in stranguria, gonorrhœa virulenta, ulceribus penis ex lue Venerea. Dosis a gr. iii. ad vj. & ultra. 2. Oleum. 3. Balsamus. 4. Colophonia. 5. Oleum cœruleum. 6. Tinctura. 7. Sal volatile *Terebinthinæ* purgans. 8. Pilulæ de *Terebinthina cum Rhabarbaro*.” *Schrod.* 736. according to whom, *Terebinthina* est duplicis generis: *Resina* scil. *Terebinthi* & *Resina Laricis*, *Resina Terebinthina* est ea quam officinæ *Terebinthinam Cypriam*, *Venetam*, appellant.” He farther adds, “Excellit præ reliquis resinis unde & facultatibus præpollet. Confert intrinsecus præcipuè in tussi aliisque pulmonum affectibus (cum melle) in urina & alvo cienda: convenit epati, lien, renibus, vesicæ; expectorationi purulentæ ac phthisi incipienti succurrit, calculum pellit, arthricos affectus juvat, uterum a saburra liberat. *Tereb. Laricea* viribus iisdem pollet, sed imbecillioribus.” 735.

“*Terebinthi Resina* ex Arabia Petraea convehitur. Provenit tamen etiam in Judæa, Syria, Cipro, Africa, & Cycladibus insulis. Præfertur autem magis perlucida, candida, vitreo colore & in cœruleum vergente, odorata ac *Terebinthum olens*. Resinas porro omnes *Terebinthina* antecedit: proxima huic lentiscina: deinde pinea & abiegna. Post has numerantur piceæ resina & strobilina. Vis autem resinæ cuivis molliendi, calfaciendi, discutendi (dissipandive) & expurgandi. . . Urinam movent, cruda concoquunt & ventrem emolliunt.” *Dioscor.* l. 1. c. 91. p. 50.

1. They are all more or less bitter, and aromatic; and differ little save in consistence, cleanness, and proportion they contain of the æthereal spirit; affording

ing the same principles by a chymical analysis, but in different proportions: as the trees which yield them are of the same nature. — 2. They embalm animal substances, are friendly to nature; and the genuine fluid, pure Turpentine, may be numbered among the natural balsams. — 3. “Terebinthinæ Venetæ ℥ij. 3xj. per B. V. distillatæ præbuerunt phlegmatis subacidi ʒiʒ; olei vero tenuissimi & limpidissimi 3x. ʒviʒ; (in all 3xi. so that there could remain only massæ ℥ij.) Massa residua, per retortam exhibuit phlegmatis acidi 3ij. ʒij; phlegmatis urinosi aliquantulum; olei flavescentis, paulo crassioris 3xij. ʒij. gr. liv; olei rufi & spissioris 3xviʒ. Carbo spongiosus levis resid. pendebat ʒvj. gr. xij; unde cinerum gr. xxij. ex quibus nullus sal lixivii ope extractus fuit.” *Geoff.* ii. 501. But here the sum is ℥ij. ʒvij. gr. lxxvj. that is an ounce too much within gr. vj. and that without including the phlegmatis urinosi aliquantulum. But supposing the error to be in the thick oil 3xvij. for 3xvj. and there were phlegmatis urinosi gr. vj. Tereb. Venetæ 3xliij. analysed yielded phlegmatis 3ij. ʒij. gr. xliij, olei duplicis 3xxxix. ʒv. gr. xvij. & carbonis fuerunt ʒvj. gr. xij. whence no salt, but only terræ gr. xxij. & jactura fuit ʒj. = the sum ℥ij. 3xj. or forty-three ounces.

“Analyſi chymica Terebinthinæ Chiæ ℥iijʒ. præbuerunt olei tenuioris, limpidi & aquei coloris 3ix; olei flavescentis 3v. spissioris vero & rufescens 3xxij; liquoris acidi gr. lx. Carbo pendebat ʒvij. gr. xxx. ex quo per horas octo calcinato, nihil salis fixi extractum fuit.” *Geoff.* ii. 497. Thus from Tereb. Chiæ 3xl. were got of phlegm gr. lx, of oil 3xxxvj, carbonis ʒvij. gr. xxx: so that the jactura (which he omits, with the quantity cinerum) must have been 3ij. ʒvij. gr. liv. Can the difference in the jactura be so great? Can no fixed nor volatile salt, and no more earth, be got from them? Can any thing be learned from these analyses? Vid. *Proces.* 35. *Boerb. Chem.* ii. 146. ad 153. (viz. “Acetum, spiritus, oleum duplex, resina, colophonia, destillatione per retortam facta, de Terebinthina.”) Whence I shall notice only two things (α). “Notabile autem, quod semper illa aqua acida pergat exstillare, quamdiu oleum illud exstillat: non autem aqua sola prius, & postea oleum.” p. 148 N°. 4. and (β). “Nihil autem in omnibus his mirabile magis, quam successiva, spontanea, inspissatio olei primi tenuissimi in spissitudinem renatam Terebinthinæ. Hujus in balsamum crassius. Ejus iterum in resinæ speciem; ita tamen, ut minor copia acidi adsit in hisce regeneratis, quam prius in nativis fuerat.” p. 152. N°. 5. What is it that thickens them? not an acid sure. — 3. The smallest quantity of Turpentine, or its spirit, oil, &c. not only taken inwardly, but also outwardly applied, soon makes the urine smell of violets. One can scarcely be half an hour in a newly varnished house, but the urine will have that scent. Oleum Juniperi has the same effect, as I observed above. Hence it may be said to contain at least some very subtile parts.

S E C T. III.

Venice Turpentine may be given to ʒj; but I think ʒj. enough at a time; and the spirit to ʒʒ. Some go much higher. Tar, if washed, is milder than Turpentine, and may be taken to ʒʒ. Terebinthina Cypria is in the Mithridate

date and Theriaca; Tereb. Veneta in the Balsamum Anodynum, and Balf. Locatelli; oleum Terebinthinæ in the Sapo Tartareus; and one or other of the Turpentine or Rosins, in many plaisters and ointments.

“Terebinthina in genere datur a ʒß. ad ʒi.” *Herman.* “Datur a ʒj. ad ʒij.” *Albin. MS.* “Exhibetur a ʒß. ad ʒiʒ” *Geoff. ii. 499.* treating of the Cyprian: but the Veneta he gives to ʒß. in several prescriptions, p. 504. The spirit he gives only ad guttas aliquot. “It is given a gut. iv. ad xij.” *Lem. Chym. 755.*

B E N Z O I N.

S E C T. I.

Benzoinum, Benivi, Asa dulcis. *offic.* Belzoinum officinarum. *B. P. 503. R. H. 1845.* Benjoinum, cujus arbor folio citri. *J. B. i. 2, 320.* Benjoini, quod neque Græcis, neque Arabibus, neque Judæis cognitum. *Garz. Clus. Exot. 155.* Benzoin. *Park. 1752.* Benzoin or Benjamin.—This is a hard, brittle rosin, of a light brown colour, but marbled with intermixed whitish or yellowish drops, of a soft, subacid resinous taste, and very fragrant sweet smell.

It is brought from the East-Indies, in pretty large masses, being the tear of a tree, wounded in the bark, about which Bontius and Garcias differ. *Vid. Dale, p. 303. and R. H.* Many believe it to be the same with an American tree, which is now no stranger in Europe, viz.

Benzoin. *B. J. ii. 259.* Arbor Benzoinifera. *Breyn. Prod. ii. 16.* Arbor Virginiana, citriæ vel limoniæ folio, Benzoinum fundens. *H. Amst. i. 189.* Arbor Virginiana, pisshaminis folio, baccata, Benzoinum redolens. *Pluk. Phyt. 139. Alm. 42.* Arbor Benzoini Grimmi. *Ephem. Germ. an. xi. p. 376?* Laurus, foliis enervibus, obverse ovatis, utrinque acutis, integris annuis. *H. Cliff. 154.* The Benjamin tree.

“Præfertur amygdaloides, quod maculas candidas amygdalarum instar refert. Optimum censetur pellucidum, suavissime spirans, nec heterogeneis inquinatum.” *Dale 303.*

“The true Benjoin *en larmes*, which is rarely found in France, and where—of the Siam ambassador’s retinue brought a considerable quantity, is of a golden yellow on the outside, white within, striped (or streaked) with slender, clear, white and red veins, friable, and without any taste; but of a sweet and very aromatic smell: very different from the Benjoin *en larmes*, commonly sold at Paris, which is in a mass, clear and transparent, of a reddish colour, and mixed with white tears, like almonds, which got it the name of Benjoin amygdaloide.” *Savary’s Dict. i. 317.* from *Pomet* chiefly, i. 181.

S E C T. II.

It is as it were a solid balsam, called pectoral; and commended internally in coughs, asthmas, consumptions, &c. and externally as anodyne, discutient cosmetic, &c.

“ Calfacit & siccatur. 2. incidit, attenuat, pulmonicum est. *Ufus præcip.* intrinsecus in affectibus pulmonum catarrhosis, tussi, asthmate. Extrinsecus in cerebro per sternutationem expurgando, in odontalgia (masticando), in tuberculis ac rubore faciei (abstergendo:) ob suavem insuper halitum creberrime suffumigiis commiscetur. *Præp.* 1. Magisterium. . . N. in sp. vini rectificatissimo, unius horæ spatio solutio absolvi potest, calore MB. saltem adhibito. 2. Flores. 3. Liquor, cum Albumine ovi. 4. Oleum. N. Benz. lbj. præbet olei ℥i℥. crystallorum seu florum ℥j. 5. Trochisci de Benzoino.” *Schrod.* 714. ad 716.

1. It is a pure resin, rather more mild than balsam of Tolu; and smells sweeter than balsam of Peru. “ Est saporis fere expers, verum odor suavissimus, qui accenso vegetior.” *R. H.* “ Saporis resinosi ac pinguis; odoris fragrantis ac suavis.” *Dale* 303. “ Saporis pinguis cum quadam dulcedine; odoris suavis.” *Herm. Cyn.* 658. “ Saporis est subamari, odoris suavis & grati.” *Nucl. Belg.* 129. — 2. It yields a very subtle and somewhat singular sal volatile oleosum acidum, or oleum volatile, salinum, acidum, called Flores Benzoini; which rise with a very gentle heat, and form into white slender needles, of a penetrating acidulous taste: they dissolve in spirit of wine, and are inflammable. Benzoini lbj. will afford florum ℥j. according to *Schroder*; but ℥ij. according to *Le Mort*, *Col. Chym.* p. 127. “ Florum salinorum ℥i℥. vel etiam ℥ij. per sublimationem Benzoini lbj. suppeditat, per decoctionem vero ℥j.” *Geoff.* ii. 518. He calls them the essential salt, tho’ he owns they do not dissolve in cold water. “ The flowers are of an agreeable smell, but strong and pungent; and of a penetrating acid taste. . . These flowers, how white and pure soever they appear, are always unpeppermables.” *Lemery’s Chym.* p. 758. so that they are an oily salt: but the salt which is got from the water with which a solution of Benzoin is precipitated, or from the water in which it is decocted or macerated, is properly called an essential salt, with which it seems remarkably to abound. “ Quia ex solutione Benzoini, post præcipitatum magisterium, repocita, concrescunt crystalli salinae, odoris Benzoini, saporis acerrimi, nonne hinc liquet sale scatere Benzoin, ut qui in aqua, ad præcipitandam resinofam partem adhibita, solutus hæsit, & postmodum ex illa separatus fuit? Si aqua, in qua macerata fuit Benzoe, ad medietatem extracta, & superflite repocita ad crystallifandum sit, concrescet pars salina Benzoes in crystallos, seu lapillos, notante Etmullero.” *Rieger. Introd.* ii. 130. — 3. The Flores Benzoini are very diaphoretic and diuretic, and perhaps preferable to the sal succini: they are commended in asthmas, &c. “ Proficui sunt ad asthma, & omnes pulmonum & thoracis affectus. Dosis a ℥ss. ad ℥j.” *Le Mort.* l. c. Is Mr. Geoffroy’s conjectural analysis of any use? ii. 518.

S E C T. III.

Benzoin or its flowers may be given to ℥j. It dissolves in common proof spirits. Its tincture is valued as a cosmetic; vid. *Boerb. Chem.* ii. 234. but it is not in use here. It is an ingredient, in substance, in the Tinctura balsamica, Pilulæ pectorales, & Ballamum traumaticum, *Pharm. Edinb.*

“ Dosis

“Dosis florum a gr. iij. ad ʒss.” *Schrod.* and *Geoff.* who adds, “in liquore conveniente soluti vel sub forma boli, in asthmate, pulmonum tuberculis, & ulcere.” ii. 519. “Dose from gr. ij. to v. taken in an egg, or in tincts.” *Lemery’s Chym.* p. 758. Is there any danger in giving ʒj?

L E C T U R E LXXIII.

C A M P H O R A.

S E C T. I.

CAmphora, Caphura. *offic.* Camphora officinarum. *B. P.* 500. Caphura. *Garc. Clus. Exot.* 160. C. Acoftæ. *Ibid.* 259. Caphura quæ salicis folio dicitur. *J. B.* i. 2, 338. Camphora. *Park.* 1575. *R. H.* 1678. Arbor Camphorifera Japonica Breynii. *Cent.* i. 11. *R. H.* 1679. Camphorifera arbor, ex qua Camphora officinarum. *H. L.* 113. Laurus Camphorifera. *Kempf. Amæn.* 770. Laurus foliis ovatis, utrinque acuminatis, trinerviis, nitidis, petiolis laxis. *H. Cliff.* 154. Arbor Camphorifera, Japonica, foliis laurinis, fructu parvo, globoso, calyce brevissimo. *Breyn. Prod.* ii. 16. *H. Amst.* i. 185. The Camphire tree of Japan.

Camphire is a white, almost pellucid, friable but softish rosin, of a fiery hot, biting, bitter and aromatic taste, and fragrant pungent smell, sublimed from the Camphire tree in the East-Indies, and refined in Europe.

“Camphire is a clear, almost pellucid, white, friable, and very inflammable substance, of a strong, piercing scent and taste, of a very volatile nature, easily wasting and evaporating away. It is brought over in flatish broad cakes, convex on the one side, and concave on the other. . . It comes from Japan, and the islands of Borneo and Sumatra.” *Miller’s Bot.* 104. “Duplex refina sub hoc nomine nobis affertur. Altera rudis, *Camphre brute* vulgò, quæ in massas friabiles, compactas ex plurimis granulis semipellucidis, rufescentibus, aut cinereis, salium granis similibus, odore fragrantis, sapore acri & sordibus inquinata deprehenditur. Altera quæ Camphora purgata, vulgo *Camphre raffinée*, resinosa est pinguiuscula, candida, pellucida, levis, sub dentibus aliquantisper lentescens, in panes seu massas orbiculares, nonnihil concavas, nitidas coacta, quinque vel sex digitos longas, unum aut alterum latas; saporis acris, amaricantis, aromatici, totum os inflammantis, cum quodam tamen frigiditatis sensu; odoris fragrantis rorismarini, sed vehementioris. Ambæ illæ Camphoræ species una et eadem sunt, nec inter se differunt, nisi purgatione, quæ sublimatione peragitur. Ex Japoniâ occidentali & adjacentibus insulis rudis in Belgium affertur, ibique repurgata, postea per totam Europam diffunditur.” *Geoff.* ii. 520, 521.

It is a large tree, and very common in Japan, from which the Camphire is separated by a very simple sublimation. “Arboris Camphoriferæ Japonensis radix, truncus, rami, folia fissa conjiciuntur in ahenum, cui imponitur caputellum seu conus ex stramine, qui usitator, vel storeis; vi substrati ignis, quicquid volatile est expellitur, & lateribus coni se applicat, quæ deinde in
“massam

"massam cogitur, & ad nos transfertur." *Herm. Cyn.* p. 617. Here water is forgot. vid. *R. II.* 1678. "Extractio Camphoræ rusticorum opus est, in provincia Satzuma, & insulis Gotho, qui radices & ligna in festucas comminuta, cum affusa aqua coquunt in vesica ferrea, impositoque capitello fictili, amplo, & (ne ex vapore erumpat) rostrato, sublimatam resinam excipiunt, stramini quod capitellum replebat adhærentem." *Kæmpf. Amæn.* p. 770. *Lemery* (*Chym.* 761. & *Dict.* 104.) says the Camphire distills from the tree drop by drop on the ground, which when gathered is the Camphire brute. In *D. Joan. Freder. Gronovii Dissertatio gradualis de Camphora. Lugd. Bat.* 1715. in 4to. there is an account of the manner of refining it in Holland; which is transcribed in *Geoff.* ii. 523. As for the Borneo Camphire, which is said to be 100 times dearer in the Indies than the Japonese, and not to waste in the air; and the Sumatra Camphire, if different, I know nothing of them, and never heard of their being brought to Europe.

About a dozen authors, who have written on this simple, are mentioned in *Seguierii Bibl. Bot.* We owe it to the Arabians, as its name shews, for they call it Casur or Canfur; vid. *Clus. Exot.* 245. *Garcias* says *Aëtius* mentions it: Mr. *Geoffroy* and *Hill* also say the same; but I cannot find it in him, nor in any Greek author that I have. There is a Camphoræ herba in *Myrepsus*, but nobody takes it for Camphire: and *Adol. Wedelius*, in his *Dissertatio inauguralis de Camphora* (*Jenæ* 1697. in 4to. *Seguier. B. B.* 311.) also writes, "Quod vero nonnulli scribunt Aëtium quoque Camphoræ meminisse, id videntur non inspecto autore affirmare. Nobis saltem, hunc in diem, non licuit id reperire, vel in Græco primæ partis codice, vel in Latina editione." *Bib. Pharm.* i. p. 463.

Authors say that Camphire may be obtained from the bark of the root of the cinnamon tree, from zedoary, schœnanthum, juniper, &c. "Ex menthæ quædam specie Camphoram mihi quoque comparavi." vid. *Herm. Cyn. Boecleri*, p. 617. ad 621.

S E C T. II.

Camphire is a very penetrating and stimulating attenuant, and diaphoretic; called alexipharmic, cephalic, and nervine; and commended inwardly in pestilential, malignant, and nervous fevers, manias, melancholy, vapours, palsies, convulsions, lethargies, faintings, &c. (in furore uterino, specificum audit); and outwardly for pains, inflammations, gangrenes, &c. as discutient and anodyne.

"Resistit putredini ac venenis, unde frequens ejus usus in peste, malignisque morbis, febribus, &c. Veneris quoque stimulum arcere, conceptumque impedire creditum est: verum, si experientia ac observatio Scaligeriana fidem meretur, citra veritatem (nisi usu continuato id experiri quis velit); suffocationi uterinæ subvenit (scil. aqua melissæ in qua Camphora extincta fuerit propinata.) Usus externus crebrior est, isque potissimum in epithematibus scil. frontalibus, refrigerantibus & paregoricis, quibus ut commisceatur, solvi solet in spiritu vini, vel conteri cum nucleis, seu semine aliquo oleaginoso, e. g. pineis, sem. citrulli & similibus. . . *Præp.* 1. Oleum Camphoræ. 2. Liquor. 3. Essentia, 4. Trochisci de Camph." *Schrod.* p. 716.

1. It is extremely hot and biting, very subtle, volatile, and inflammable. “Facile flammam concipit, quam in mediis etiam aquis inextinguibilem pertinaciter retinet; sub dentibus lentescens, & exigua portione, totum os veluti inflammans, odore vehementi.” *J. B.* “Saporis acris, amaricantis, aromatici, pinguis & lenti; odoris fragrantis & gravis.” *Herm. Cyn.* 616. “Odoris est penetrantissimi & fragrantissimi: saporis acris, calidi, in ore pustulas excitans.” *Nucl. Belg.* p. 55. “Saporis, &c. *Geoff.* ut supra. An actual cautery red hot is said to feel cold: whether justly or not I know not. Camphoræ ʒʒ. exposed to the free air, in thirty-three days lost upwards of ʒij. whereas wrapt up in a bit of bladder it lost only ʒj. more in three years. — 2. As it easily takes fire, and is difficultly extinguished, so it consumes intirely, leaving nothing behind it: and, as far as I can find, it is not in the power of art to analyse it, or resolve it into more simple constituent principles. Mr. Lemery attempted this several ways, but without success: it sublimed always without separation, and was Camphire still. *vid. Mem. Acad.* 1705. p. 47. where it was observed that (α) sp. vini rect. ʒj. can dissolve Camphoræ ʒʒ. (“ʒj. of highly rectified sp. vini will take up Camphoræ ʒvj.” *Lewis’s Pharm.* p. 15): (β) spir. terebinthinæ, vel olei oliv. ʒj. dissolves Camphor. ʒij: (γ) sp. nitri ʒij & Camphoræ ʒj mixed produced olei ʒxʒ. without heat: (δ) aqua regia ʒiij turned Camphoræ ʒj to oil; spiritus salis had little effect: (ε) ol. vitrioli ʒiv dissolved intirely Camphoræ ʒj, but did not turn it to oil. Spiritus vitrioli, aluminis, & aceti, made no solution; neither did (ζ) sp. salis ammoniaci, nor oleum tartari per deliquium (four times its quantity of the volatile and eight times of the fixed alcali were taken:) and (η) that a solution of Camphire in sp. vini, mixed with sp. salis ammoniaci, coagulated. Hence it appears that Camphire is a singular kind of rosin, very homogeneous in its nature, and rather antacid than acescent, yea it appears to have no acid in it. “Acidi sales sola tantum desflagratione manifestos se prodent.” *Geoff.* ii. 526. “Si Camphora in aperto acre comburatur, nihil prorsus cinerum, vel terræ post se relinquit; sed tota in flammam dissipatur, & quædam ejus portio in atram fuliginem vertitur, nullumque acidum manifestum præbet.” *Idem.* p. 525. — 3. It is of great use in all cases requiring heating diaphoretics, or a brisk stimulus in the nerves, especially in lowness of spirits, melancholic and maniac diseases. *Vid. Dr. Kinneir’s Letter, Phil. Transf.* N°. 400. If Camphire be cooling, as the Arabs generally make it, spirit of wine is cooling too. And quod Venerem extinguat is as little consonant to reason as it is confirmed by experience. *vid. R. H.* 1679. Some say it is narcotic; others that nimius ejus usus vigilias facit. *vid. J. B.* others that it specifically corrects cantharides. But I doubt of its having any of these effects, if judiciously administered. Omne nimium vitiosum.

Carolus Neumannus P. chyniæ at Berlin, thinks the Borneo Camphire a fiction. *vid. Phil. Transf.* No. 389. where there is an account of what he calls Camphora thynii: which, No. 390. Mr. Brown shews is only a congealed oil, in many things differing from Camphire: and that marjoram yields the same. See also No. 409. or *Abridgm.* vol 6. 2. p. 321. See also *New Dispensatory*, p. 103.

S E C T. III.

It is commonly given to gr. v: but there is no danger in ʒß; and in maniacal disorders the dose may be ʒß. The spiritus vini Camphoratus has almost Camphoræ gr. xxxvij. in each ounce. Camphire is in the aqua ophthalmica, (though of no use there,) tinctura cantharidum, pilulæ foetidæ, trochisci albi Rhafis, balsamum saponaceum, unguentum album camphoratum, ung. desiccativum rubrum, ung. ophthalmicum.

"Its dose is from gr. j. to vj. or viij." *Quincy's Pharm.* p. 158. "Dosis a gr. iij. ad ʒj." *Geoff.* ii. 527. Dr. Kinneir gave it to ʒß to a woman of nineteen. vid. *Phil. Transf.* l. c. vid. Julepum e Camphora *Ph. Lond.* & Julapium hystericum Camphoratum. *Ph. Bat.*

C A R A N N A.

S E C T. I.

Caranna. offic. *Caranna. B.P.* 503. *Monard. Clus. Exot.* 298. *Park.* 1576. *R.H.* 1847. *Caranna* Garcie nomine data resina. *J.B.* i. 2, 329. Tlahueliloca Quahuatl, id est arbor insanie, Caragna nuncupata. *Hernander* 56. *Caranna.*—This is a solid but softish resin, of the consistence of common pitch, of a dark brown or blackish colour, of a viscous resinous taste, and pretty fragrant smell, especially while burning; brought from New Spain, in thin little cakes, covered with leaves to prevent their cohering. But the surface soon becoming friable and dusty, the leaves fall away, and we only have it as the Dutch *Caranna.*

"Ex continentis parte interiore, per Carthaginem & nomen Dei defertur
"resina colore tacamahacæ, sed splendidior, liquidior & densior, lingua Indica
"Caranna, odore tacamahacæ sed graviore. . . . Medicamentum novum est,
"quod decem annis elapsis primum huc illatum est." *Monard.* who is the first who describes it. But since him authors differ much about it. Vid. *J.B. Herman, Dale, Miller, Geoffroy, Lewis.* "There is little of it that is right
"to be had for several years." *Miller's Bot.* iii. vid. *Savary's Dict.* i. 544.
"Foris ex cinereo nigricans; intus picei coloris, saporis viscosi amaricantis,
"odoris dum accenditur fragrantis." *Herm. Cyn.* 656. and *Dale* 324. only he adds resinous to the taste. "It is a blackish, resinous, friable gum, shining if broken; of a pleasant smell while it is burning." *Miller's Bot.* 110.
"Intus obscura, fusca; saporis resinosi, subamaricantis, ad myrrham aliquantisper accedentis." (cætera ut Dale) *Geoff.* ii. 530. Vid. N.B. infra.

S E C T. II.

It is used only outwardly as anodyne, and discutient, for pains, tumors, rheums, &c. but seldom now in Britain.

“ Calfacit & ſiccac 3. Viribusque pollet iſdem quibus Tacamahaca, qua
 “ tamen operando citior & efficacior eſt, præcipue in tumoribus, omniſque
 “ generis doloribus, maxime juncturarum, tumores inveteratos diſſolvit, de-
 “ fluxiones frigidas aut mixtas ſiſtit, nervorum ac cerebri dolores ſedat, vul-
 “ nera recentia præſertim nervorum & juncturarum ſola ſanat, deſluxiones in
 “ oculos & alias partes reſtimit (pone aures, vel temporibus impoſita). (è Mo-
 “ nard.) Solvitur in oleo. Præparatur inde emplaſtrum antipodagricum in-
 “ ſigne. R Carannæ ʒj. ceræ flavæ ʒʒ. cum oleo verbaſci f. emplaſt.” *Schrod.*
 719. *Geoffroy* gives this plaſter as his own.

N. B. “ Eſt gryſeonigri coloris, odorem ſpirat lavendulæ, ſi fricetur aut ac-
 “ cendatur; ſaporis eſt reſinoſi, viſcoſi, & amaricantis.” *Nucl. Belg.* 129.
 “ Caragne is a very rare gum in France; ſeldom found pure, others being
 “ ſubſtituted in its place. It is white as it comes from the tree, but as it grows
 “ old, it becomes of a greeniſh gray colour.” *Savary, Diſt.* i. 544. “ The
 “ ſorts which I have ſeen have rather reſembled ſtorax than myrrh, both in
 “ taſte and ſmell, and appeared outwardly of a dark browniſh colour, and
 “ upon breaking, of a brown with a caſt of red, variegated with irregular
 “ white ſtreaks.” *Lewis Ph.* 16.

It is reckoned more efficacious than Tacamahaca. “ Sic ut quos Tacama-
 “ haca non curarit Caranna ſanet. Exemplum vidimus in eo qui ob humeri
 “ cruciatus jam multo tempore brachium movere non poterat, tametſi Taca-
 “ mahaca uſus eſſet; ſed poſtquam Caranna uti cœpit, triduo ſanitati reſtitu-
 “ tus eſt.” ſays *Monardes*. “ Diſtillatione oleum eſſentiale ſubtile, acre, ru-
 “ brum, & ſumme odoriferum, ex ea extrahitur; a quo pendet ejus virtus
 “ tumores reſolvendi, dolores ſedandi, & nervos roborandi, &c.” *Geoff.* ii.
 531. But where is the true Caranna to be found? Who diſtilled it? I know
 nothing about it.

C O P A L & A N I M E.

S E C T. I.

1. Copal, Refina Copal, Pancopal, *offic.* Refina Copal, Copal, *Schrod.* 720.
 Refina Copal, *R. H.* 1846. Copal *Monard.* *Cluſ. Exot.* 297. Gummi Copal,
Park. 1670. Copal *Monardi, B. P.* 504. “ *Rhus Virginianum*, *Lentilci*
 “ *foliis, R. H.* 1799. *Rhoi obſoniorum ſimilis Americana*, Gummi candi-
 “ dum fundens, non ferrata, foliorum rachi medio alata, *Pluk. Alm.* 318.
 “ *Phyt.* 56. Refina Copal, *offic. Dale* 315.” Gum Copal—is a white, ſhining,
 ſomewhat transparent roſin, in pretty large pieces, hard and brittle, and odo-
 riferous, and fragrant, but leſs ſo than the gum Anime.

2. Anime, Gummi vel Refina Anime, *offic.* Anime *Monardi, Cluſ. Exot.*
 297. Anime ex *Hiſpania nova ſive America, B. P.* 499. Gummi Anime,
Park. 1670. *R. H.* 1864. Gummi ſeu Refina Anime, *Schrod.* 710. Gummi
 Anime—is a ſolid, but not very hard roſin, of a yellowiſh white colour, ſome-
 thing like the common frankincenſe, of a ſoft reſinous taſte, and very pleaſant
 fragrant ſmell.

Both are brought from New Spain; and are often confounded in authors,
 one calling Copal what another calls Anime. I follow *Monardes*, but cannot

warrant all the synonyma. “ Duo refinarum genera multum similia ex Hispania nova adferuntur, quorum unum Copal vocatur, alterum Anime. Copal Refina est admodum candida, & lucida, & transparens, magnis fragmentis. Diacitro valde transparenti haud dissimilibus, satis odorata, sed non perinde ut Anime. Ea Indi in suis sacrificiis, suffumigii loco utebantur. . . Anime est Refina alba, ad Thuris colorem nonnihil vergens, verum Copali magis oleaginoso. Defertur granis Thuris, sed crassioribus, quæ contracta, luteum colorem ostendunt instar Resinæ: gratissimi ac suavissimi est odoris, & prunis imposita, facile consumitur.” *Monard. l. c.* Mr. Dale thinks Monardes, under the name Copal describes the Anime, and è contra Anime by the name Copal: and yet he makes the Copal *B. P. Park.* and *R. H.* the same with his Refina Copal offic. which are evidently synonyma of the Copal Monardi: though his descriptions differ from those of Monardes. “ What we in England call Gum Copal, is called Gum Anime in foreign parts: and, on the contrary, what they call Gum Anime we call Copal.” (He means what we call Gum Anime, they call Copal.) *Miller Bot. 223.* Yet the French Gum Anime seems to be the same with his, being hard, transparent, and pretty like yellow amber; as *Savary* describes it *Diét. ii. 256*, and being the rosin of a tree, called by the Portuguese Courbaril: which is also *Geoffroy’s* Anime Americana, although he describes Monardes’s Anime, *ii. 513.*

Now since according to *Piso* Copal is a general name for all the odoriferous gums and rosins of trees among the Indians; and *Hernandez* mentions eight sorts of copalliferous trees: since there are oriental as well as occidental rosins called Anime; of which *J. B.* describes five kinds: and since the rosin of the same tree may have very different appearances, according to the time and manner of collecting it, &c. no wonder that the history of these rosins is so perplexed and confused. *Clusius (Exot. 159,)* has three oriental gum Animes, all very different from one another, of which one is thought to be the Cancamum Dioscoridis, *l. i. c. 23. p. 19.* and another the Myrrha Animæ ejusd. *l. i. c. 77. p. 42.* Whence perhaps the Portuguese, who brought the oriental Anime first to Europe, gave it the name Anime, or Aniimum; which is now rare to be found.

S E C T. II.

They are called cephalic and nervine; and commended for pains, rheums; contractions of the nerves, palsies, contusions, luxations, &c. as anodyne and discutient; but they are only used, and that externally, in ointments, plaisters, fumigations, &c.

“ Refina Copal calfacit 2. humectat 1. emollit, resolvit. *Usus præcipue* in affectibus cephalicis. *Præp.* Oleum tenuius & crassius: elicetur ut ex Anime.” *Schroder. 720.*

“ Res. Anime, calfacit 2. humectat 1. attenuat, resolvit, astringit, discutit, cephalica est. *Usus præcipuus* est externus in capitis ac nervorum affectibus frigidis dolorificis, catarrhosis, flatulentis in affectibus articulorum, paralyti, contractura, luxationibus, contusionibus, &c. *Præpar.* Oleum stillat. fit per retortam ex arena. Colligi possunt sigillatim oleum tenuius ac crassius.” *Schrod. 710.*

They are aromatic rosines, and not acrid : so may be of use in warming and comforting the parts to which they are applied. “ Gum Anime is little used at present, and not often to be met with in our shops. Gum Copal is not much used.” *Miller, Bot.* 222. The Copal is used in vernishes. “ Sequentes vernices magni facit. *Koenius.* R Gum. Copal ℥iv, mastiches ℥ij, pulv. affunde sp. vini rectificatissimi lbß. in vitro bene obturato leni calore solvantur, dein in B. V. digerantur, & habebitur vernix elegantissima. R Gum Copal, sandarach. aa ℥iv, mastich ℥ij, succini elect. ℥vj, laccæ ℥vj, resinæ splendent. ℥j: pulverilatis affunde S. V. rectificatissimi, ad eminentiam 6. digitorum, & in calore solvantur & digerantur.” *Boecl. Cynof.* vol. 2. p. 694. Vide analysin utriusque apud *Geoff.* ii. 514.

E L E M I.

S E C T. I.

Elemi, Elemni, Gummi Elemi, Resina Elemi, *offic.* Gummi Elemi officinarum, *B. P.* 504. Elemi Resina, *J. B.* 1. 535. Gummi Elemi, *Park.* 1586. *R. H.* 1847. Gummi Elemi, seu Elemni, seu Elevi, *Hoffm.* 217. “ Arbor Brasiliensis gummi Elemi simile fundens, foliis pinnatis, flosculis verticillatis, fructu Olivæ figura & magnitudine, *R. H.* 1546. Icariba Brasiliensis, cujus Resina dicitur Icaica, *Marcq.* p. 98. The Gum Elemi tree.” *Dale* 308. Gum Elemi, or Gum Lemon—is a softish, semipellucid rosin, of a yellowish-white colour inclining to green, of a resinous bitterish taste, and fragrant smell, somewhat like that of anethum. It is brought from the West Indies, in long roundish cakes, wrapt up in leaves.

Many would have it to be the Lachryma Oleæ Æthiopicæ, *Dioscor.* l. 1. c. 141. p. 72; and Elemi a corruption of ἐλαια; but without any reason. Vide *R. H.* 1847. and *Geoff.* ii. 532. “ It is certain it cannot be the gum of the Ethiopian olive, for it is said that the gum of the olives will not burn like rosin, nor melt with the heat of fire.” *Park.* 1586. “ Verum Elemi, seu Æthiopicum, est resina flavescens, vel ex albido tantillum virescens. . . . Raro nunc in officinis occurrit.” *Geoff.* ii. 531. Was it ever in the shops? *Savary* mentions three sorts of rosines, which sometimes pass for Elemi; and also a way of counterfeiting it. Vide *Diæ.* 1. 1791. and *Geoff.* ii. 434.

S E C T. II.

It is commended for wounds, contusions, fractures of the head, nerves, joints, punctures of tendons, &c. in ointment, plaister, tincture, &c. outwardly : and by some in gonorrhœas inwardly. But it is little used except in the Linimentum Arcæi.

“ Calfacit temperate, emollit, digerit, resolvit, maturat, dolorem sedat, capitis ac nervorum affectibus, eorundemque vulneribus, ac imprimis calvariæ vulneratæ specificè confert, contusionibus articulorum prodest, menses ac urinam

G g g 2

“ ciet.

"ciet. *Præpar.* Oleum stillat. specificum præ aliis (ut & ipsa resina) censetur
 "in affectibus nephriticis, paralyti, contractura." *Sekrod.* 720.

It is a soft aromatic rosin, somewhat milder than turpentine, but we know little of the tree whence it comes. For the analysis vide *Geoff.* ii. 533.

"Saporem est non ingrato, nonnihil acris & subamaro; odore fere fœniculi."
J. B. & R. H. "Saporis resinosi & pinguis, odoris fragrantis, cum suavitate
 "graviusculi." *Herman. Cyncl.* 655. "Saporis moderate acris, & subamari,
 "odoris resinæ fortioris, ad fœniculum accedentis." *Nucl. Belg.* 130.

L E C T U R E LXXIV.

L A D A N U M.

S E C T. I.

L Adanum, Labdanum, Laudanum, *offic.* Labdanum, *Pharm. Edinb. & Dale* 232. cui & Ladanum, *offic.* "Labdanum Gummi Cisti Ladani-
 "teræ Creticæ flore purpureo. T. Cor." *Pharm. Lond.* p. 11. Ladanum is a dark purplish-brown rosin, of an oily, warm, bitterish taste, and very agreeable fragrant smell. It is brought to us in larger, or slenderer twisted rolls, full of sand and dross; being gathered from the leaves of a shrub, growing in Candy, and some of the Archipelago islands, on which account it is called

Cistus Ledon Cretense, *B. P.* 467. *T.* 260. *R. H.* 1010. Cistus Ledon latifolium Creticum, *J. B.* 2. 9. Cistus Ladanifera Cretica flore purpureo, *T. Cor.* 19. *Voy.* 1. 29. C. Ledon Matthioli, *Ger.* 1289. C. Ladanifera Cretica vera, *Park.* 666. C. a qua Ladanum in Creta colligitur, *Bellon. Obs.* l. 1. c. 7. p. 14. Ladanum Creticum, *Alp. Exot.* 88. Cistus Ladanifera, *offic. Dale* 232. The true Ladaniferous Shrub, Cistus, or Holly-Rose. *N. B.* Nec in *B. J.* nec *H. Cliff.* invenio.

The leaves of this shrub, with which some sandy dry hills in Crete are covered, in the hot summer months sweat out this odoriferous rosin, at first clear, liquid, and shining, but soon sullied by the dust of the soil. The discovery whereof, as well as of the manner of collecting it, is by all antiquity attributed to the goats; which, browsing on the Cistus, loaded their beards, and long hair, with the Ladanum, which remarkably perfumed that stinking animal; and invited their owners to comb it from them. "At ληδανον, quod
 "Arabes λασδανον vocant, etiam Cinamomo mirabilius comparatur. Quippe
 "in graveolentissimo loco nascens, tamen, fragrantissime olet." *Herodot.* l. 3. c. 112. *Bod. in Theoph.* p. 556. a. "Est & alterum Cisti genus, Ledum a
 "nonnullis appellatum. . . . Fit autem ex eo quod Ladanum dicitur siquidem
 "cum Cisti folia depascuntur capræ hircique, pinguitudinem conspicue barbis
 " & femoribus, quoniam viscosa sit, adhærescentem, excipiunt contrahuntve,
 "quæ depexa, colatur, & in offas efformata reponitur. Alii, attractis per
 "frutices funiculis, inhærentem iis pinguetudinem deradunt & in offas co-
 "gunt. Maxime vero probatur odoratum, sub-viride, facile mollescens, pin-
 "guè, arenæ squalorisve expers, ac resinosum. Tale autem est quod in

“Cypro gignitur. Arabicum vero Libycumque vitius est.” *Dioscorid.* l. 1. c. 128. p. 64. Vide *Bod.* in *Theoph.* p. 551. ad 558. The modern manner of collecting it is described by Bellonius, l. c. by T. Voy. let. 2. vol. 1. p. 29; and Cornelius le Bruyn, in his *Voyages*: see *Savary DiB.* iii. 2. col. 195. 6. 7. briefly.

The instrument made use of in Crete resembles a garden or hay-rake, without teeth; in place of which, two rows of long thongs or straps of leather, are tightly fixed at one end to the head of this rake, the other end being loose: the Greeks call it Ergastiri. These straps in the heat of the day (in July chiefly) the natives wave up and down upon, and so beat and brush the leaves of the Cistus till they become loaded with the Ladanum: it is then scraped off with knives, and made up into cakes. In a good day a man will thus gather about an oque (*i. e.* 50 ounces) of Ladanum, worth a crown on the spot: but it is hard labour. The best of it must be dirty: besides, the peasants knead it with the black sand and dust of the soil, or place where the shrubs grow. Vide *T.* &c.

“There are three kinds of Gum Labdanum in the shops; the finest is of a shining black colour when broken, somewhat hard, but easily softening by heat, of an inflammable substance, of a sweet pleasant agreeable smell. The second sort comes over in rolls, like Spanish juice of licorice, but is tougher, harder, not so black, but more droffy, and of a less fragrant smell. The (third or) last and coarsest sort, is made up in rolls, twisted about like the rolls of small wax candle: this is full of sand and dross, and of a weaker scent than either of the former.” *Miller Bot.* 252. My friend Dr. *Fothergill* purchased the best of each of these kinds of Ladanum he could find in London. They tolerably agreed to the above description; only the first did not smell near so sweet and agreeably as the second and third, though these were so full of dross that the flame of a candle could not melt them. The finest was certainly much adulterated, if there was any Ladanum in it. I had also a second sort, which was more resinous than the former second sort, and melted a little at the candle, but seemed to have less Ladanum in it than the coarsest. We have here commonly two kinds; one in larger thick and straight rolls; and another in smaller twisted rolls, which is the more droffy of the two, but both equally fragrant: but I don’t think one quarter of either of them is Ladanum; though what they do contain, seems to be pure and genuine.

N. B. I found that our Ladanum *in tortis* did not contain so much; for from 101 grains of it calcined I had cinerum gr. lxxij, which looked like a sort of brick earth: so that not a third of it is combustible. I found also that alcohol dissolved not fully a sixth part of the same Ladanum: that is, alcohol dissolved only gr. x. out of 5j, gr. i. of the Ladanum *in tortis*.

It is *λαδανον*, *ληδανον*, or Ladanum, in every Greek and Latin author. Why then Labdanum in our Pharmacopœia? In *Pharm. Lond. edit.* 1721, it is Labdānum, or Ladanum, which was omitted in the preceding edition. The *New M. M.* retains Labdanum, though it be neither Greek nor Latin.

S E C T. II.

Ladanum, if pure, seems to agree with balsam of Peru. It is called cephalic, pectoral, nervine, and astringent; and commended in coughs, catarrhs, strangury, dysentery: but it is now used only externally as anodyne, discutient, and strengthening, in balsams, plaisters, perfumes, &c.

“Calfacit, siccat, emollit, digerit, maturat, attenuat, aperit, orificia venarum referat, inspissat. *Ufus præcip.* in capite humido ac catarrhoso, in dysenteria, &c. Extrinsecus ejus usus est in emplastris emollientibus, anodynis, tussim sedantibus, in alopecia (inunge & coque in vino, & lava,) in odontalgia, in cardialgia, doloreque ventriculi, (cum modico bdellii faciunt pilulas dandas N^o. 1. & 2. hora una ante pastum. *Crato*.) in suffocatione uteri (introrsum adhibitum.) *Præp.* 1. Oleum stillat. 2. Pilulæ de Ladano. N^o. 1. Coctione in aqua non nisi portiuncula minima solvitur; relinquitur pars major intacta, quæ non minus quam illa commoda est. N^o. 2. Et si inflammabile Ladanum sit, non tamen pinguibus solvi potest.” *Schrod.* p. 724. “Ladani oleum odoratum unguentarii hoc modo parare norunt. R Ladani pinguis & præstantissimi lbj. In tenuissimas partes divisum coquatur cum aq. rosarum ℥vj. olei amygdalarum dulcium ℥iv. per semihoram. Percoletur liquor oleosus.” *Geoff.* ii. 543.

1. It is somewhat bitterish, but neither acrid, nor nauseous, and leaves in the mouth a very pleasant perfumed flavour, which lasts a considerable time; and it has a very sweet scent, more agreeable than that of the Peruvian balsam. “Ladanum offic. laudabile viscidus est succus, in magnas offas coactus, easque graves, ex purpura fuscas, odore valido, sed suavi, præsertim si calorem senserit, cujus etiam beneficio mollescit, veluti & mansum, saporem imprimans adstringentem.” *J. B.* 2. 7. “Odore valido sed suavi, accensaque gratum odorem halans.” *R. H.* 1008. “Saporis amaricantis, odoris dum accenditur fragrantis & grati,” *Herman. Cyn.* p. 675. “Odoris grati & fragrantis, præcipue dum igni admovetur, ubi facile mollescit & flammam concipit; saporis est amaricantis & subausteri.” *Nucl. Belg.* p. 132.—2. It melts and flames in the fire, and dissolves in spirits and oils. Some say it dissolves in water. Though *Schroder* does not allow it to dissolve either in water or oils. The quantity of dross and sand in it occasions the difference.—3. “Analyti chymica, Ladani in panes orbiculares contorti lbij exhibuerunt phlegmatis rufescentis, odoris grati, & acidi saporis ℥ij. ℥ij. gr. xlvij; liquoris fulci, cum acidis tumultuantis ℥ijss; olei ℥j. ℥vij. gr. xxiv. Carbo pen-debat ℥xxvj. ℥vij, qui calcinatus nihil aliud esse videbatur quam arena insipida, ex qua fere nihil salis fixi extractum fuit.” *Geoff.* ii. 542. Sum. ℥xxxj. ℥ivss: so that the Jactura must have been only ℥ijss; for he does not mention it, nor the weight of the cineres. Hence he gives it a sal essentialis ammoniacalis; and adds, “Sed insuper videre est Ladani lbij. arenæ ℥xxiv. circiter continere, ac proinde, vix Ladani puri & genuini ℥iv. in singulis vulgaris Ladani libris continere.” *Vide N. B.* supra.—4. It is unfit for inward use unless purified; or in tincture with spirit of wine. Can decocting it in water separate the heterogenous substances? It is now (though formerly in the empl. cephalicum) in none of our compositions. The *London Disp.* orders in the emplastrum

emplastrum cephalicum, and empl. stomachicum, considerable quantities of the Labdanum molle; but where a genuine Ladanum molle is to be had I know not; it being soft, I think, only at first or liquid in the heat of the day in the summer, even in Candy. All the soft that ever I saw was evidently adulterated.

M A S T I C H E.

S E C T. I.

Mastiche, Mastix, Resina Lentiscina, *offic.* Resina Lentiscina sive Mastiche, *B. P.* 501. Lentiscina Resinæ, Mastiche, *J. B.* 1. 288. Resina Lentiscina Mastiche dicta, *R. H.* 1580. Mastick. — This is a solid, brittle, semipellucid, yellowish-white rosin, in small, and commonly roundish drops, softning in the mouth, without adhering to the teeth; of a subacid, agreeable resinous taste, and fragrant smell; which flows from incisions made in the trunk, and larger branches of a tree, called

Lentiscus, *offic.* Lentiscus vulgaris, *B. P.* 399. *T.* 580. Lentiscus, *Dod.* 871. *Lob.* 538. *Clus. H.* 14. *Ger.* 1432. *Park.* 1525. *R. H.* 1579. *J. B.* i. 285. Pistacia foliis abrupte pinnatis, mas & fœmina, *H. Cliff.* 456. Lentiscus *offic.* Dale 283. The Mastick-tree — of which the Lentiscus vera, ex insula Chio, cortice & foliis fuscis, *Cat. H. Amstel.* in 8vo. p. 192. *B. Ind.* 2. p. 174. Lentiscus *offic.* the Mastick-tree of Dale 283, is but a variety, not a different species, according to Linnæus, who is certainly right. Vide *T. Voy.* vol. 1. let. 9. p. 144. where it is particularly described. “Male confunditur cum
“Lentisco vulgare, in Catalogo Plantarum usualium horti Harlemonsis, cum
“sint duæ diversæ species.” Dale 283.

The Lentiscs are not scarce in Provence, Languedoc, Spain, Italy, Sicily, &c. but yield little Mastick, except in Scio: and even there all the Lentiscs do not afford it. See for a particular account of the manner of collecting, managing, and disposing of it, and of whatever is curious concerning these trees, *Thevenot*, in Harris’s Col. vol. 2. p. 416. and *T. Voy.* l. c. and if you please *Bellon. Obs.* l. 2. c. 8. p. 86, *Savary Dist.* iii. 523. I have a Lentiscus vulgaris, *B. P.* which seldom fails when any way hurt in the bark in summer, to yield a small tear of Mastick. Lacuna, Matthiolus, and Cæsalpinus say the Lentiscs of Italy afford some of this rosin, but *Bellonius*, *J. B.* and Mr. Ray never met with any of it. “Imported from Scio by Smyrna and the Archipelago, to
“Marseilles annually, between 70 and 80 quintals of Mastick.” *Carf. Sav. Dist.* iii. 523. Scio is said to afford yearly above 1000 chests of Mastick, that is (a chest containing 90 oques,) 281,250 pound weight; of which 300 chests, or 84375 pounds are payable to the Sultan, according to Thevenot. Do none of the other Archipelago islands afford Mastick?

N. B. “Chii humanitate reliquos mortales superant, nec alium locum sci-
“mus in quo suavior vitæ ratio haberi queat, & fœminæ elegantioribus mo-
“ribus & forma sint præditæ; celebratæ olim pulchritudinis, adhuc amplum
“testimonium præbentes, &c.” Vide *Bellon.* l. 3. c. 8. p. 85.

S E C T.

S E C T. II.

Mastick is antiseptic and diuretic, milder than the Scio turpentine; called astringent, stomachic, nervine; and commended internally in vomitings, fluxes, spitting of blood, coughs, fluor albus, &c. and externally for pains, rheums, weakness of the nerves, &c. in masticatories, plaisters, fumigations, &c. The dose in substance is ℥j.

“Calscit & siccat 2. subastringit, emollit, ventriculum roborat. *Ufus præcip.* in vomitu, nausea, ac fluxu alvi compescendo. Obtundit ac corrigit purgantium acrimoniam; reprimit exhalationes ventriculi, quæ caput alias ferire solent (granis aliquot post pastum deglutitis,) roborat caput nervosum: que genus, expuitioni sanguinis, ac tussi medetur, emendat oris halitum, pituitam e cerebro elicit (masticando). Extrinsecus usus ejus creberrimus est in dentrificiis, emplastris, ac cataplasmatibus stomachicis. N. coquitur ℥℔ in aquæ ℔biiij. vel iv; daturque pro potu ordinario in diarrhœa. *Præpar.* 1. Oleum stillat. seu flavum. 2. Oleum rubrum seu balsamus. 3. Oleum per deliquium albumine ovi. 4. Oleum Mastichinum. (Coctione in oleo.) 5. Spiritus Mastiches. 6. Sp. vini Mastichatus. 7. Aqua Mastichina. F. F. 8. Pilulæ Mastichinæ.” *Schrod.* p. 625.

1. It is a pure rosin, agreeably aromatic, rather acidulous than astringent; and easily dissolves in oils, or spirits; yea almost dissolves in the mouth. “Odorem non ingratum spirat. Sapor leviter astringens, cum calore modico.” *J. B. R. H.* “Saporis resinosi & astringentis; odoris fragrantis.” *Dale* 282. “Saporis est leniter austeri, odoris satis grati.” *Nucl. Belg.* p. 188. “Prunis injecta flammam concipit, odorem non ingratum spirat, & sapore donatur leviter aromatico, resinoso & subastringente.” *Geoff.* ii. 544.—
2. The folia, cortex, and lignum Lentisci are reckoned astringent, and were used as such by the ancients. “Ad ulcera in utero resiccanda argenti florem in vino terito ac infundito. . . . Aut Lentisci folia (σχινα φύλλα) in aqua coquito & cum hac postea colluito.” *Hippoc. De Morb. Mul.* l. 1. ed. *Lind.* p. 633. He uses them also ad fluores muliebres, p. 668. “Lentiscus nota arbor est, partibus sui omnibus astrictoria. Etenim ipsius fructus, folium, ramorum & radice cortex pares vires sortiuntur. Exprimitur & succus ex cortice, radice ac foliis sufficienter in aqua decoctis. . . . Acaciæ & Hypocistidis vice ipso uti licet. . . . E Lentisco quoque resina nascitur, Lentiscina cognominata, & a nonnullis Mastiche . . . præstantissima & copiosissima in insula Chio provenit, &c.” Vide *Dioscor.* l. 1. c. 89. & 90. But thus it is not much used here: neither do we value tooth-picks made of its wood.—
3. The chymical analysis explains nothing. “Analyti chymica ex Mastiches ℔biiij. prodierunt liquoris acidi ℥iv. ℥iijß; olei fluidi ℥iijß. gr. x; olei spissioris ℥xx. Carbo pendebat ℥iij; unde cinerum ℥iij, ac inde salis fixi falsi gr. iv. (ergo terræ ℥ij. gr. lxxvij), & Jactura fuit ℥ij. ℥j. gr. xxvi.” *Geoff.* ii. 546. where it is much commended; as is also a decoction of the wood, from the authority of a German physician (in *Ephem. Germ.* Dec. 3. an. 9. & 10.) who calls it aurum potabile vegetabile. In a word, Mastic is a sort of mild solid balsam. It was of old, and still is much used in Turkey as a masticatory. I tried it, but it made my gums, &c. tender and somewhat sore; so that I laid it aside. At, inde nomen!

It

It is an ingredient in none of the compositions *Pharm. Lond.* and is only in the magma hedychroi, & empl. defensivum *Pharm. Edinb.* ed. 1744.

S T Y R A X.

S E C T. I.

Styrax, Storax, S. calamita. *offic.* Styrax, five Storax officinarum; quia striatim ex arbore exstillat. *B. P.* 502. Styrax calamita officinarum. *J. B.* i. 2, 345. Styrax succus; officinis Styrax calamita. *R. H.* 1680. Storax—is a softish solid rosin, made up of drops (or grains) of a yellowish or reddish colour; of a soft, resinous, aromatic taste, and most fragrant smell, somewhat resembling that of the balsam of Peru. Of this *Mr. Lewis*, *Pharm.* p. 65. makes the two sorts, following *Mr. Geoffroy*, who owns however that they do not really differ. “Prima est Styracis lachryma quæ ex tenuioribus arboris rimis, vel incisuris guttatim stillat, & citissime exsiccata fuit atque collecta. Altera vero succus est ex grandioribus vulneribus uberius diffuens, qui nonnisi post diuturniorem moram inspissatur; ita ut acris calidioris contactu rufescat vel nigrescat antequam exsicceetur.” *Geoff.* ii. 566. This I reckon only a conjecture. For the size of the grains we see very different in mastick, myrrh, olibanum, &c. And as for the consistence, it seems purely owing to age. The *Cod. Med.* has only St. cal. & St. liquida. However, our

Styrax calamita. *offic.* is in lumps or masses of a coarse grain, and reddish-brown colour, composed of some true Storax, and a great deal of bran, sawdust, or some such stuff, but very odoriferous and sweet smelled.

This is the Styrax *Pharm. Lond.* and we have no other: and the Storax it contains is as good as, if not preferable to, any that I have seen; but must be separated from the dross, before it is fit to be used inwardly. According to *Cordus*, (vid. *J. B.* i. 2, 342.) a pound of this Storax will not afford an ounce of the true rosin: but I found that sp. vini dissolved near one half of it, without heat: and it is thus strained; “Styracen calamiten coque in aqua, donec mollescat, deinde prelo exprimatur inter laminas ferreas tepefactas, & Styrax purificatus ab aqua separetur.” *Pharm. Lond.* p. 25. Upon this *Dr. Pemberton* remarks,

“The Storax being a resin only softens by the heat of the water, but does not dissolve in it.” *Dispens.* p. 152. But will it not by coction lose some of its proper spirit? Is it not better extracted sp. vini? “Scobs quædam lignea, nonnihil resinosa, odore Styracis perfusa, venalis prostat in officinis, quæ scobs Styracina, *Sarrilles de Storax*, vulgo dicitur. Ad usum medicum inutilis est, & prorsus abjicienda.” *Geoff.* ii. 566. But I suspect that his Styrax vulgaris, seu in glebas compactus. *offic.* vulgo *resine de storax*, and his Styrax calamita, *off.* vulgo *Storax en larmes*, are both factitious or adulterated; and made up, perhaps, in the countries where they are produced, into the form in which we get it. The tree that produces the Styrax is said to be the

Styrax folio mali cotonei. *B. P.* 452. *T.* 598. Styrax arbor. *J. B.* i. 341. *Ger.* 1526. *R. H.* 1680. Styrax arbor vulgaris. *Park.* 1529. Styrax. *Lob.* 579. *H. Cliff.* 187. Styrax offic. *Dale* 297. The Storax tree,—which grows in

Italy, Crete, &c. Thus, "In insulis Maffiliensibus & locis calidioribus." *Herm. Cyn.* 662. "In Italia, Sicilia, &c. oritur." *Dale* 297. "It grows in the eastern countries, as also in Italy, where it yields no gum, that being brought from Turkey." *Miller* 427. "It comes from Arabia and Syria to Marseilles." *Savary's Dict.* ii. 1631. "Ex Syria aliisque Indiæ Orientalis locis per Maffiliam nobis affertur." *Geoff.* ii. 566.

This is generally supposed to be the *styrax* Hippocratis (*de Morb. Mul.* l. 1. p. 620. lin. 25, &c.) et antiquorum; though Dioscorides, l. 1. c. 79. p. 44. says, "Est admodum acris qui fraudis expertus est." vid. *Plin.* l. 12. c. 25. & *Bod. in Theoph.* 1029.

2. *Styrax liquida. offic.* *Styrax liquidus cordi. B. P.* 502. *Storax liquidus ruber officinarum. J. B.* i. 345. *Styrax liquidus. R. H.* 1681. *Styrax liquida offic. Dale* 298. *Liquid Storax.*—This is a soft resinous substance, of the consistence of honey, of a grayish or reddish-brown colour (which make two sorts of it, called in Holland the white and the black liquid Storax), of an oily subacid aromatic taste, and fragrant smell. The white smells like Storax; the black is more strong and footy smelled. There is also a pellucid kind, called *S. l. finissima*.

The Arabians, I think, first mention a liquid Storax: for it does not appear to be the "*χρυσμα styracινον*, *Styracinum unguentum*, quod ex eo in Syria concinnatur." *Dioscor.* l. 1. c. 79. Serapion's liquid Storax is the oil expressed ex nucleis arboris Storaci fluæ; and Avicenna's *Styrax humidus* is made by decocting the bark. *Schrod.* 743. Cordus and others think it a factitious compound, (vid. *J. B.*); others that it is a native rosin; as Bellonius, (vid. *J. B.*); while Mr. Pettiver makes it a kind of birdlime or viscum; tho' it is very inflammable, and resinous, but not very viscous. Probably it is all factitious. Vid. *Dale*. It is little used, and expelled the *London M. M.*

"*Rosa Mallas* grows upon the island Cobrosi, at the upper end of the Red Sea, near Cadefs, which is three days journey from Suez. It is the bark of a tree (which is taken off every year and grows again) boiled in salt water till it comes to a consistence like birdlime, then separated, and put into a cask, and brought to Judda, and so to Mocha, in June and July, where it sells from 60 to 120 dollars per barrel, according to its goodness. The best is what is freest from clay and dirt, which is commonly mixed with it: and the way to try it is to wash it in salt water, which will cleanse it. The Arabs and Turks call it *Cotter Mija*. A barrel is 420 lb." Thus *Pettiver, Phil. Trans.* No. 313. Geoffroy on this article has little but what he borrows from Dale, as Dale borrows from Schroder; though neither own to whom they are so much obliged.

"It ought to be of a gris de souris, Storax smell, good consistence, without filth or moisture, and true Dutch. Much comes from the Levant, particularly Smyrna, whence is brought *com. an.* 2000 occos." vid. *Savary's Dict.* ii. 1632.

S E C T. II.

Purified Storax has the virtues of ladanum or balsam Peru, and Benzoin. It is called cephalic, nervine, and pectoral; and commended internally for coughs,

coughs, hoarseness, colics, sinking of the spirits, &c. and externally as anodyne and discutient: and thus only the liquid Storax is used, for tumors, contusions, &c.

“Calfacit, exiccat, emollit, concoquit, cephalicus inprimis est, & nervinus; medetur tussi, catarrhis, raucedini, gravedini; vulvæ præclusæ duritie laboranti, extra & intra datus, convenit: immiscetur cardiacis et lætificantibus; alvum leniter mollit, si cum terebinthina in forma catapotii assumatur. Extrinsecus suffitu capiti adhibetur. *Præp.* 1. Oleum stillat. cujus gutta auribus instillata sibilum discutit. 2. Ol. coctum. . . De oleo Styracino refert Dioscorides, quod calfaciat vehementer & emolliat, verum caput dolore afficiat gravetque & saporem adferat. Quæ facultates in Styrace liquido deprehenduntur.” *Schrod.* 742.

It is not acrid, but a very fragrant rosin, and comes near in scent to the Peruvian balsam. “Saporis subacris, lenti aromatici, odoris suavis.” *Herm.* l. c. “Saporis subacris, resinosi, odoris fragrantissimi.” *Dale* 297. “Saporis subacris, odoris suavis, fere instar balsami Peruviani. Optime dissolvitur in spirituosus.” *Nucl. Belg.* 280. “Sapore resinoso, subacri, non ingrato; odore fragrantissimo, præsertim ubi prunis injecta fuerit.” *Geoff.* ii. 565. “Analyti chymica ex Styracis purissimi lbij prodierunt phlegmatis acidi 3ij. 3vij. gr. xlvij; olei essentialis limpidi, rufescentis 3j. 3vß; olei spissioris, cum floribus salinis Benzoini floribus similibus permixti 3ij. 3ij; tandem olei fluidi, rufi, aliquantisper empyreumatici 3ij. 3ij. Massa nigra superstes pendebat 3ix. 3v; unde cinerum 3iß, ac inde salis fixi salis gr. vij. Jactura fuit 3iv. gr. lx.” *Geoff.* ii. 567. So there were terræ chymicæ 3xj. gr. lxxv. N. B. The sum being but twenty-four ounces, the pound here must consist of twelve ounces only, or the analysis is very faulty.

When I poured water into the solution of Storax in alcohol in order to precipitate the rosin, and filtered it, the water came through whiter than whey, and what remained continued long soft; I could obtain thus no more than gr. vij. though gr. xxx. were dissolved of Styracis 3j.—The solution was made in May 1749: and in March 1752 it was still soft. Is it on this account that so much heterogeneous stuff is mixed in it?

S E C T. III.

It may be given to ʒj. It is an ingredient in the mithridatium, theriaca, pil. e Styrace; and the liquid Storax in the empl. mercuriale.

T A C A M A H A C A.

S E C T. I.

Tacamahaca. *off.* Tacamahaca. *B. P.* 503. *Monard. Clus. Exot.* 298. *Park.* 1608. *R. H.* 1846. Tacamahaca—is a solid or dry rosin, in lumps composed of grains of different colours and sizes, of a bitterish resinous aromatic taste, and fragrant smell, somewhat like that of mastick.

H h h 2

“ There

“ There are two sorts of this gum; one in lumps which is dry and resinous, crumbling at first between the teeth, but when chewed a while sticking together, made up of little yellow reddish grains clinging together, of a pleasant strong smell, somewhat like mastich; the other sort is what is called Tacamahac in the shell, being of one texture, smooth, and in colour like strained galbanum, of a pleasant smell like the former.” *Miller's Bot.* 430.
 “ Tacamahaca vulgaris in granis, vel in glebis albicantibus, flavescentibus, rufescentibus, virescentibus, aut variegatis semipellucidis habetur, odoris fragrantis.” *Geoff.* ii. 570.

It is brought from America. Monardes is the first author who mentions it. “ Defertur ex Nova Hispania, gummi seu resinæ genus, ab Indis Tacamahaca vocatum. Colligitur vulnerata arbore magna ut populus, admodum odorata, cujus fructus ruber est, pæoniæ feminis modo. Colore est galbani unguibus albis uti ammoniacum, odore gravi, atque etiam sapore, ita ut prunis injecta, & naribus admota, mulieres uteri suffocatione laborantes ilico liberet.” *Monard.* l. c. “ Tacamahaca in conchis . . est odoris aromatici fragrantissimi & suavissimi, ad lavendulæ & ambari cineracei odorem accedentis, saporis resinosi, aromatici. Raro admodum in officinis reperitur. Altera species vulgaris est. . Odoris fragrantis, ad prioris odorem accedentis, sed minus grati.” *Geoff.* ii. 570. The tree which affords it grows in New Spain and Madagascar, according to Lemery, Savary, Geoffroy, &c. And it is supposed to be the

Arbor Populo similis resinosa altera. *B. P.* 430. Tacamahaca populo similis, fructu colore similis (*pro feminis*) pæoniæ. *J. B.* i. 2, 346. Tacamahaca foliis crenatis, sachelhaut, seu lignum ad ehippia conficienda aptum. *Par. Bat.* prod. 379. *Pluk. Phyt.* 228. Populo similis arbor resinosa altera. *B. P.* Tacamahaca, *Ibid.* *B. J.* ii. 211. Tacamahaca. *off.* The Tacamahac-tree. *Dale* 302. *Vid. Mill. Dict.* v. 2.

S E C T. II.

It agrees with caranna or eleimi in virtues; and is used only as anodyne and discutient, in plaisters, &c. for pains, tumors, rheums, &c.

“ Calfacit in principio 3. siccat 2. validæ astrictionis particeps; digerit, resolvit, maturat, tumores emollit, dolores ac flatu discutit: uterina inprimis est nervina & cephalica. *Ufus* præcipue externus est. Prunis injecta, naribusque admota, mulieres uteri suffocatione laborantes ilico liberat. Umbilico emplastri modo imposita uterum suo loco retinet (*usu familiarissimo.*) Ventriculum roborat, defluxionesque quascunque e capite defluentes reprimat (*lintheo excepta, & post aurem alteram saltem, vel utramque applicata, suffituve attracta.*) Temporibus adhibita (*cerati modo*) defluxiones in oculos, aut alias facie partes, revellit, dolorem dentium sedat (*dentibus etiam corruptis indita:*) abdomini emplastri instar imposita, uteri fluxum cohibet: magnæ est efficacæ in doloribus articulorum (*coxendicis*), juncturarum ac nervorum vulneribus imposita eadem curat, nimirum statim suppurare facit & spasnum prohibet. *Monardes.* N. 1. Adeo celebris est apud Indos ut ad qualemcunque dolorem adhibeatur, nec aliud remedium norint, modo non

“ adsint

“ adfint inflammationes admodum calidæ. N. 2. Inveteratos cruris dolores
 “ Tacamahaca emplaftri loco impofita curatos vidi. *Præp.* Emplaſtrum flo-
 “ machicum.” *Schrod.* 744.

It is a pure roſin, bitteriſh, aromatic, and not diſagreeable to the taſte, and of a pleaſant ſcent. “ Saporis aromatici, reſinoſi odoris fragrantiffimi.” *Herm. Cyn.* 656. “ Saporis aromatici, reſinoſi odoris fragrantis.” *Dale* 302. “ Saporis ſubamari, odoris fere carannæ.” *Nucl. Belg.* 135. “ Sub dente in pulverem diſſilit primum, mox rurfum recolligitur, lentefcensque pro arbitrio ducitur. Sapore eſt amaricante haud ingrato & aromatico. Suffita jucundum ſpirat odorem, & maſtiches fere æmulum, minus vehementem & ſuaviorem, nulloque relicto craſſamento conſumitur. Importatur cucurbitino cortice comprehenſa. De Tacamahaca ita Joannes Poſthius, p. m. cecinit.

“ Indomitam lenit ſi Tacamahaca podagram

“ Et omne corporis pathos;

“ Illam ego prætulerim, quas venditat India gemmis.

“ Arabumque gazis omnibus.

“ Nam quis divitiis validos non præferat artus,

“ Triftique ſenſu liberos.” *J. B.* i. 2, 347.

Hence it ſeems firſt to have come in the gourd ſhells, which probably is the true genuine Tacamahac; which is rare now-a-days. What I have in the ſhell ſmells like lavender and ambergris. It is expelled the *London M.M.* But *ours* retains it.

“ Analyſi chymica Tacamahacæ lbj præbuerunt phlegmatis acidi ℥iij. 3v; olei triplicis lbj. 3vj. 3ij. Carbonis fuere ℥ij. 3iij. gr. lxxvij; unde cinerum 3j, ſed inde nihil falis; & jactura fuit ℥iij. 3v. gr. xxv.” *Geoff.* ii. 570; who adds, “ Raro interne uſurpatur. A quibuſdam in pectoris affectibus commendatur; ſed externo uſu eſt frequentiffima. Ad quofcunque partium externarum dolores compescendos, utiliter præſcribitur, præſertim ab humoribus frigidis & flatulentis oriundos. . . Specificum expertum in dolore ventriculi a Poterio prædicatur. Et Michaelis feliciter utebatur in febribus malignis, ubi de anxietate præcordiorum ægri conquerebantur. Idem illius emplaftrum commendat Etmullerus in vomitu compescendo. Capiti impoſita cephalalgiam ſublevat, & catarrhos cohibet: nervorum, tendinum & articulorum vulneribus conducit. Hoſteterus (*in obſ.*) empl. de Tacam. capiti raſo admoto, ſurditatem ſe curaffe refert.” *Geoff.* ii. 571.

It is an ingredient in the baſf. anodynum (*vulgo* Guidonis), emplaftrum anodynum, emplaftrum antihyſtericum, cephalicum, ſtomachicum, & volatile. *Pb. Edinb.* edit. 1744.

III. G U M - R O S I N S.

A L O E.

S E C T. I.

1. Aloe, Aloe Succotrina, *offic.* Aloe Succotrina, quaſi ſucco citrino; vel potius Socotrina, a ſolo natali Socotra inſula. *B. P.* 495. Succotrine or Socotrine

torine Aloes.—This is the inspissated proper juice of the Aloe Succotrina angustifolia, spinosa flore purpureo. *Breyn. prod.* ii. 12. *H. Amst.* i. 91. *T.* 366. *R. H.* iii. 569. Aloe vera minor. *Munt. Aloed.* 20, 21. *B. J.* ii. 129. Aloe Americana minor; foliis per margines frequentissimis & molliusculis spinis armatis. *H. L.* 16. Aloe Indiæ orientalis, ferrata, sive Succotrina vera, floribus phæniceis. *H. Beaun.* 5. Aloe Succotrina. *offic.* Succotrine Aloes. *Dale* 249.—It is of a shining black colour, friable, and when powdered yellow; of a nauseous and very bitter taste, and somewhat strong, but not very disagreeable smell.

It grows in both the Indies. That from Zocotra, or Zocotora, an island in the oriental ocean, near the gulf of Babelmandel, is most esteemed. It comes in skins from the East-Indies. “It is blacker, and more shining and brittle, than the hepatic aloes, and, when powdered, of a fine yellow colour, not apt to clod together after it is powdered, and of but little smell in comparison to the other.” *Miller’s Bot.* 26. Authors, as *Schroder*, *Geoffrey*, &c. mention a transparent Aloes called Aloe lucida; but I could never meet with it. The Barbadoes Aloes is more pellucid, if very thin, than any Succotrine that I have seen.

2. Aloe hepatica, Aloe Barbadenfis. *offic.* Hepatic or Barbadoes Aloes—is of a brown liver colour, and more offensive or foetid smell than the Succotrine. It is the juice of the Aloe vulgaris. *B. P.* 286. *T.* 366. *H. Ox.* ii. 414. *R. H.* 1195. Aloe. *Dod.* 359. *J. B.* iii. 696. Aloe vulgaris sive sempervivum marinum. *Ger.* 507. *Park.* 149. Aloe vera vulgaris. *Munt. Aloed.* 17. Aloe Dioscoridis. *Colum.* i. 40. Aloe Dioscoridis & aliorum. *Sloan. Cat. Jam.* 15. *Hist.* i. 245. Aloe. *offic.* Common Aloes. *Dale* 248. Aloe, foliis spinosis, confertis, dentatis, vaginantibus, planis maculatis. *H. Cliff.* p. 130. The common Aloe. It is a native of both Indies, &c.

“Cum flores non examinaverim, an specie differant difficile est determinatu; a facie tamen conjunctionem postulant. *Beslerus* flores Aloes vulgaris in scapo ramoso pingit; *Commelinus* vero Aloes Succotrinæ scapo & floribus sequentis (*i. e.* Aloes Africanæ, caulescentis; foliis magis glaucis, caulem amplectentibus, & in mucronem obtusorem desinentibus. *Commel. rar.* p. 44. cujus scapus non ramosus,) simillimos exhibet.” *Lin. H. Cliff.* p. 131. In the beginning of the winter, 1747, a Succotrine Aloes put out its flower stem, which was a large spike, very thick with flowers, but not branched: the frost killed it before any opened, through the negligence of the gardener.

3. Aloe Caballina. *offic.* Aloe Caballina (quod equis & veterinariis dicata fit) livida, arenosa. *B. P.* 495. Horse Aloes.—This is reckoned by some to be only the more feculent part of the common hepatic Aloes: by others, to be the juice of the Aloe Guineensis, Caballina, vulgari similis, sed tota maculosa. *Commel. præl.* 40. *Dale* 249. “*Usu.* Succus inspissatus, cujus pars impurior, arenosa, sordibus conspurcata, & idcirco nigricans Aloe Caballina dicitur. Pars purior, colorem hepatis referens, Aloe hepatica vocatur. Caballinam vocat *Commelinus*, quia fractis foliis succus Aloen Caballinam redolet.” *Dale l. c.* How does this differ from the Aloe vulgaris? “Colligitur Aloe Succotrina in insula Succotra, quod in fundo ab illa sæculentum remanet, id Aloem Caballinam constituit, differuntque plantæ, ex quibus colligitur

“ colligitur hepatica & Succotrina, non niſi loco natali. Hepatica colligitur
 “ in China, non in Socotra, Caballina conficitur etiam in omnibus tractibus
 “ Indiæ Orientalis maritimis.” *Herm. Cyn.* 689; who calls the plant, which
 affords all the three, Aloe Aſiatica. “ Ab eruditif. D. Hans Sloane, ex pro-
 “ pria obſervatione, cum in inſula eſſet, certior factus ſum Barbadeſem Aloen,
 “ Aloes vulgaris. *B. P.* ſuccum eſſe.” *Dale.* The Barbadoes Aloes is brought
 over in large gourd ſhells. We never keep the Horſe-Aloes.

The manner of collecting the juice, as related by P. Herman, was com-
 municated to Mr. Ray, by Dr. Palmer; and you have it fully in his *H. P.*
p. 1196. and ſomewhat abridged in *Dale*, *p.* 249: from whom, without nam-
 ing the author, *Geoff.* ii. 650. copies it; applying it to the Succotrine, though
 it reſpects all the three in *R. II.* He alſo gives another way of making the
 hepatic in both Eaſt and Weſt-Indies, thus, “ Folia (Aloes vulgaris. *B. P.*)
 “ minutum ſecta & contuſa, in vas oblongum & cylindricum reponunt per
 “ dies 25. Spuma attolitur inutilis & abjicienda. Tum ſuperior ſucci pars
 “ ſumitur, a ſæcibus ſeparatur, & calore ſolis concreſcit in Aloen hepaticam:
 “ ſæces vero inſpiſſatæ impurum præbent extractum, quod caballina Aloes no-
 “ mine donatur. Aloe caballina propriè dicta, odore ſuo ingrato ac veliemente
 “ a cæteris diſtinguitur, licet cum vulgari cæteroquin ſat bene conveniat:
 “ imo nonnunquam adeo lucida & pura præparatur, ut a Succotrina nonniſi
 “ odore tetro diſtingui poſſit.” Thus *Geoff.* ii. 651. makes hepatic Aloes an
 inſpiſſation of all the juices: one ſort of horſe Aloes an impure extract; and
 another a very pure concreted juice; but tells not whence nor how it is pre-
 pared.

I do not find Aloes in Hippocrates, nor in Theophrastus; but it ſeems to
 have been famous in Auguſtus's days, if Cæſus lived then. “ Sed medica-
 “ menta ſtomachum fere lædunt. Ideoque omnibus catharticiſ Aloes miſcenda.
 “ eſt.” *Cæſ.* l. 2. c. 12. vid. l. 1. c. 3. And *Dioſcorides*, l. 3. c. 25. and
Pliny, l. 27. c. 4. are long on it, and (as do all the ancients ſince) much
 commend it. Dioſcorides, after a particular deſcription of the plant, adds,
 “ Plurima in India præpinguiſque naſcitur: ex qua etiam coactus ſuccus im-
 “ portatur. Naſcitur & in Arabia, Aſia, ac in locis quibuſdam maritimis &
 “ inſulis. . . Duo ſunt ſucci genera: alterum arenolum, quod puriſſimæ veluti.
 “ ſæx & craſſamentum eſſe videtur: alterum quod ad jecinoris imaginem ver-
 “ git. Eligito pinguem” . . . (then follow the virtues of it interne, externe,
 among which he obſerves), “ ſed & aliis purgantibus medicamentis admiſta,
 “ præſtat ut minus ſtomachum infeſtent” . . . (and concludes) “ Lavatur &
 “ Aloe; atque id quod arenolum ſubſidet, tanquam inutile ſecernitur: pin-
 “ guiſſimum autem, quodque læve eſt recipitur.” Pliny has but one Aloes,
 of which among other things he ſays, “ Uſus multus, ſed principalis alvum
 “ ſolvere, cum pene ſola medicamentorum quæ id præſtant confirmet etiam
 “ ſtomachum, adeo non infeſtet ulla vi contraria.” l. c.

“ Aloe dicta videtur, quia maritimis gaudet. A recentioribus ſemper-
 “ vivum & ſempervivum marinum, quod ſempervivi modo diu durer, appel-
 “ latur: ſedum amarum Columellæ: & quia ejus ſuccus amarus eſt, idcirco
 “ & gentianam, quæ amariffima eſt, Aloen Gallicam Appleius nominavit.”
B. P. Caballina Indi utuntur pro incruſtandis navibus picis loco; norunt
 nunc eam expurgare a ſordibus, ita ut a Succotrina etiam experientiſſimus
 “ vix contradiftinguere valeat.” *Herman. Cyn.* *p.* 630.

S E C T. II.

Aloes is an acrid, detergent, deobstruent cathartic; called stomachic, uterine, anthelmintic, and vulnerary, and is commended inwardly in weakneses, infarctions, and obstructions of the viscera, where phlegmatic and viscid humors prevail, or the bile wants its proper acrimony; and outwardly for foul ulcers, &c. *Magni usus est.*

“Vim præter purgantem obtinet & exiccantem gr. iij. calfacientemque gr. ij. Proritat hæmorrhoides & menses, roborat ventriculum, enecat & expellit lumbricos, arcet putredinem, astringit, exterget, adeoque vulneraria est insignis. *Præp.* 1. Aloe depurata sive lota. N. Aloe constat parte resinosa & aquea, illa purgationi inutilis, hæc idonea. 2. Balsamus seu extractum cum sp. vini. Dosis a ʒj. ad ʒß. 3. Aloe violata. Dosis a ʒß. ad ʒß. 4. Aloe violata tartarea. Dosis a ʒß ad ʒj. R. Al. viol. p. 11. “Cryſtal. tart. per unam. 5. 6. 7. Aloe rosata. 8. Oleum Aloes purgans.” *Schrod.* 779.

1. It has a very bitter and nauseous taste, making a lasting impression, and a strong smell which I cannot call aromatic. “Est tota planta odore gravi, & gustu amarissima.” *Dioscor.* l. c. “Odor inest bonus quidem sed suus; sapor autem primo gustatu dulcis, dein subamarus.” *Mesue Simpl.* l. 1. c. 1. p. 25. “Saporis acris, amarissimi, nauseosi, pinguis, oleosi, & adstringentis; odoris fragrantis ad myrrham accedentis.” *Herman.* l. c. “Odore gravi, aromatico; sapore amaro admodum ac abhorrendo, & mirum quod manu tantum attrectanti, illius vapore inficiatur aer, atque guttur amarum reddatur.” è *Column. R.H.* 1195. “A Succotrina saporem habet insigniter amarum adstringentem, aromaticum, aliquantulum tenuem, & oris halitum commendantem: odorem autem aromaticum & tamen gravem. Hepatica odore & sapore Succotrinam æmuletur, gravius tamen olet, pauloque amarior existit, magisque adstringit. Caballina gustu amarissima, & valde adstringens, non sine horribili qualitate aliqua palatum & stomachum afficiens.” *J.B.* iii. 698; who has near four pages on it. “Saporis valde amari & acris; odoris acris, fere instar myrrhæ vel olei spicæ. Caballina est fere nullius odoris.” *Nucl. Belg.* 14. “Aloe Succotrina aromaticam amaritudinem respicit, odore gravi, aromatico tamen, nec adeo ingrato myrrhæ proximo. Hepatica est odore graviore, sapore intensius amaro. Caballina odore ingrato & vehemente a cæteris distinguitur.” *Geoff.* ii. 650, &c. The smell has some resemblance of myrrh, but a disagreeable one. Though it does not appear astringent to my taste, yet a solution of vitriol and of Aloes mixed become black. Its binding effect seems chiefly to depend on its purging. For it is but a weak astringent; and the more it purges, the more costive is the belly afterward. — 2. It consists of a resinous and a saline part: and I found that water dissolved as much of the Succot. Aloes as did spirit of wine, viz. $\frac{7}{8}$ parts. But of the hepatic water dissolved only $\frac{3}{4}$. Whereas spirits of wine took up much more. (a) According to *Mr. Bolduc*, (*Mem. Acad.* an. 1708.) the Succotrine Aloes contains one half part less of rosin, and one third part more of gummy parts, than the hepatic. For though both dissolved completely in boiling water, yet some parts, when cold, subsided: and he had from
Aloes

Aloes Succot. ℥iv. extracti gummosi ℥ij. ʒj. & extracti resinosi (from what subsided with sp. vin.) ʒvj. gr. xxiv: the faeces weighed gr. lx. so that there evaporated ʒvij. gr. lx. But from hepatic aloes ℥iv. there were extracti gummosi ℥j. ʒij. ext. resinosi ℥j. ʒij. & sacum ʒivß. so that ʒvß. were lost. But how much sulphur or resin is dissolved in the gummy or aqueous extracts cannot hence be determined. In order to this, they should have been first extracted also with spirit, and the residuum with water, in which manner he treated jalap. (β) The gummy part only is cathartic, the resin purging little or none at all; so that the extract with water is stronger than the substance. (γ) The resin is that on which the balsamic and vulnerary virtues depend, which he found to be very effectual in wounds. Hence it is of a very different nature from the resina jalapæ & similia. (δ) The Succotrine is more cathartic than the Hepatic, which is a better vulnerary than the Succotrine; consequently, for internal use the Succotrine is to be preferred, and for external the Hepatic: "Insuper salina pars in Hepatica a resinosis debite temperatur, non item in Succotrina. . . Ex quibus sequitur Hepaticum Succotrinæ anteponendam esse, tum ad usum externum, tum etiam ad usum internum. Quod jam nonnulli, contra vulgi opinionem, tueri ac probare conati sunt; ut Jubera, pharmacopœus Hispanus, apud Zacut. Lusitanum, & alii apud Rolsincium, p. 36. *De purgantibus*." Geoff. ii. 653. P. Herman says also, "Hepatica mihi optima videtur." Cyn. p. 690. Though the London dispensatory has thrown it out altogether, retaining only the Aloe Socotorina, which should be written Zocotrina, according to *Pechlinus de purg.* 141.

That the purgative part of Aloes is gum or mucilage, has been observed by many. Vid. *Schred.* But authors differ as to the nature of its resin. "Aloes extractio cum spiritu vini pessima tormina ventris & hæmorrhoides excitare solet." *Marif. Col. Chym. Leid.* p. 40. "Aloes resinofitas præcipuus tenefmi illius hæmorrhoidalis autor est." *Ludov. Pharm.* p. 40+20. "Aloes pars gummea ad alvum sollicitandum, præ resinosa parte longe aptior, ac tenefmi hæmorrhoidalis respectu, cæteris paribus, pene securior est." *Idem de vol. sat. tart.* p. 557. "Etmullerus duas substantias in Aloe agnoscit, mucilaginosam, ex qua vis purgans pendet; & resinofam in qua astringens seu fibras roborandi vis latet." *Geoff.* ii. 661. And if the resin be so mild as Mess. Bolduc and Geoffroy make it, the Hepatic in most cases is much to be preferred to the Succotrine, and the substance to the aqueous extract. But will not the extract do as well as the substance in a smaller dose? Does not the extract lose by decocting? Experiments are wanting to determine these. Vid. *Pemb. Disp.* p. 170. who, on the R for the gummi & resina Aloes, remarks: "The intention of this separation of the resin is to procure in the gum a medicine less purgative, but more agreeable to the stomach than the crude Aloes." But would it not thus become more purgative? Certainly: if this quality is not diminished by long coction. Vid. *N. Dispensatory*, p. 73, 74. & 253. where we find—"I have exhibited this resin, divided by trituration with the testaceous powders, in the dose of a scruple, without observing any effect from it."

3. When it is taken it does not soon purge, even sometimes not the first day; although a small quantity of it seldom fails to operate at length. "Tarde purgat Aloe." *Hoffman*, p. 7. § 17. "Vix intra 24 horas absolvit operationem,"

"tionem, ut Fallopius observat." *Id.* p. 8. § 18. "Verum de una Aloe
 "mirum est, quod in dura melancholicorum alvo, minore in dosi, plus ad-
 "ferat commodi, quam maxima, & quod spem frustrante vehementissimo
 "purgante solâ sæpe temperie aperiat felicius." *Peckl. de purg.* p. 141, who
 reckons it among the ignava & tardigrada purgantia. It is found also power-
 fully to provoke the hæmorrhoids and menstrua: so that its operation does not
 solely depend on its stimulus in the primæ viæ. "Partium tenuitate fundit
 "sanguinem, & ad vasorum extrema deducit: earundem crassitie fit ἀναστο-
 "μωτικόν. De vi illa anastomotica scripti sunt integri libri." *Hoffman*, p. 8.
 "Docet experientia, quod frequens Aloes usus hæmorrhoidarum venas ape-
 "riat, quod ego millies observavi; & vos ex 100 eorum qui Aloe ad ex-
 "cernendas fæces utuntur videbis 90 hæmorrhoidarum fluxum pati; omisso
 "vero Aloes usu, venas illas claudi." *J. B.* iii. 700.

"Tho. Bartholinus, *Act. Med.* 1673. obs. 64. exemplum adducit urinæ
 "cruentæ ex nimio Aloes usu." *Vid. R. H.*

"Si Aloe detur in majori copia, eo magis postea astringit, in minori dosi
 "magis purgat." *Albin. MS.* In a word, Aloes is quasi bilis ipsa, though
 less saponaceous, and so may be called hepatic as well as stomachic. Hence
 in bilious and sanguine constitutions and diseases, in pregnancy, and where
 hæmorrhages are to be feared, Aloes is not to be used: but in opposite cir-
 cumstances it does great service.

"Aloe foris cum felle bubulo, intus autem cum melle vermes necat. Au-
 "genius non novit præstantius ad illos remedium, quam si pueris detur. Et
 "credo plus posse quam sementina." *Hoffman*, p. 6. Yet *Redi* found that
 worms lived many days in moist earth mixed with powdered Aloes, after they
 had been twenty-four hours in a strong solution of it in water. "Idem ex-
 "perimentum, adds he, iteravi, quatuor lumbricis in eandem tincturam im-
 "missis. Post tres dies integros nondum mortui erant, sed sub finem quarti
 "diei omnes extinctos inveni. Quo ergo fundamento credi potest Aloen tam
 "potens præsensque remedium esse adversus lumbricos, ac scriptores vulgo
 "memorant." *Obs.* p. 158. "Aloe & colocynthis, fermentationem passæ,
 "amarorem amisisse Wedelio observantur. *Act. Lips.* 1686. p. 366." *Boerb.*
Chem. ii. 184. "Aloe est pulcherrimum, & innoxium purgans." *Ibidem*,
 p. 283. Yet it wants not its enemies.

"Analysi chymica ex Aloes hepaticæ lbij. prodierunt humorum 3xj. 3vj.
 "gr. viij; olei 3j. 3vij. gr. xlvi. Carbones pendebant 3xv. 3ij; unde cine-
 "rum 3ij. 3v. gr. xlii, ac inde salis fixi falsi 3ij. gr. xxxiii. (ergo terræ 3ij.
 "3ij. gr. ix:) & jactura fuit 3ij. gr. xvij." *Geoff.* ii. 654; who begins his
 account of its virtues thus: "Aloe medicamentum fuit ab omni ævo com-
 "mendatissimum, tum ad usum internum, tum ad externum." . . ; then dis-
 cusses the following several controversies about it; as, (α) De virtuti ejus pur-
 gante (*scil.* an inter eccoprotica, an inter cathartica sit recensenda.) (β) De
 virtute roborandi viscera. (γ) De ejus vi anastomotica. (δ) De vulnera &
 ulcera glutinandi, & sanguinem sistendi ejus virtute. (ε) De dosi ejus. (ζ) De
 ea utendi tempore. (η) De ejus lotione, nutritione seu insuccatione, ultione,
 &c. all which are easily solved from what is above said. He has more than
 seventeen pages on Aloes. I cannot but mention his tritum adagium, viz.
Qui vult vivere annos Noe, sumat pilulas de Aloe.

It is an efficacious medicine, and so may be, and has been, abused to the prejudice of such as did not want it, as well as by the ignorance of such as did not understand the nature of it; of which even Galen is accused. "De Aloe diversos Galeni libros legenti, videbitur ipse quibuscumque in locis sibi maxime contradicere," says *J. B.* For sometimes he makes it only an ecoprotic; sometimes a weak cathartic, emptying only the stomach and intestines; "Etenim (says he, *De comp. med. x. r. l. 8.*) etsi quandoque, amphori pondere exhibita, usque ad locos circa jecur se diffundat, non tamen totius corporis purgatoria Aloe existit." Whereas at other times he makes it to purge the whole body: "Aloe (inquit *l. De Theriaca ad Pisonem*) atque etiam æris squama . . . assumpta per os universum corpus purgant, &c." Vid. *J. B.* iii. 699, &, si placet, *C. Hoffman*, p. 4—10.

S E C T. III.

It may be given to $\mathfrak{z}\mathfrak{i}\mathfrak{j}$; but $\mathfrak{z}\mathfrak{j}$ need not be exceeded: $\mathfrak{z}\mathfrak{ß}$ is commonly enough. It is used in the tinctura myrrhæ & aloes, elixir proprietatis utrumque, tinctura sacra, elixir sacrum, pulvis hieræ, pilulæ coccinæ, rufi, exphracticæ utræque, de gambogia, Rudii & stomachicæ, balsamum traumaticum, & unguentum vermifugum; *Pharm. Edinb.* 1744. In all which the succotrine is ordered, except in the tinct. myr. & aloes, and B. traumaticum; and that also prepared or washed, unless it be Aloe lucida purissima. But who now prepares Aloes for any of these?

"Aloe præparata, seu lota. Aloe solvatur in aquæ fontanæ q. s. adhibito leni calore: colata, rejectis fæcibus, evaporetur in mellis spissitudinem. Aloe lucida purissima non indiget lotionem." *Pharm. Edinb.* 1756. "Ubi cunque in pharmacopœia occurrunt hæc medicamenta, hisce modis præparata esse intelligantur, nisi præscribantur sine præparatione." *Ibid.* Aloes is no where ordered unprepared.

It was given to $\mathfrak{z}\mathfrak{i}\mathfrak{j}$ by Dioscorides and Pliny; but among the moderns, (though some follow the ancients) scarcely any go the length of $\mathfrak{z}\mathfrak{j}$. „ Aloe datur in substantia ad $\mathfrak{z}\mathfrak{i}\mathfrak{j}$ Sennerto & Fernelio; ad $\mathfrak{z}\mathfrak{i}\mathfrak{j}$ Horstio & Heurnio; ad $\mathfrak{z}\mathfrak{i}\mathfrak{ß}$ Duncano; ad $\mathfrak{z}\mathfrak{j}$ Curtio." *Paulli*, p. 576. "Dosis $\mathfrak{z}\mathfrak{j}$. $\mathfrak{z}\mathfrak{j}$. $\mathfrak{z}\mathfrak{i}\mathfrak{j}$." *Bates*. "Exhibetur tantum a $\mathfrak{z}\mathfrak{j}$. ad $\mathfrak{z}\mathfrak{i}\mathfrak{j}$ sub forma boli vel pilularum: adeo enim amara est & nauseosa, ut palatum vix reperiatur, cui Aloe soluta possit exhiberi." *Geoff.* ii. 660. N. B. Tinct. sacra.

"Pro scopo laxandi & purgandi extrahatur Aloe cum aqua simplici, vel fumaricæ, &c. sale tartari, vel oleo tartari per d. guttis aliquot acuata; quo mediante mucilaginosâ substantia laxativa elicitur, relicta resinosa inutili, quæ in aqua non solubilis est. Tinctura inspissata dat extractum catharticum in pilulas formandum a gr. iij. ad vj. egregie laxans, vel ad $\mathfrak{z}\mathfrak{j}$. fortiter purgans. Interim non nimis salis tartari addatur alias vim purgandi omnino destruit; cum alcalibus enim in sufficiente quantitate sp. vini digesta amarorem & vim catharticam insigniter deponit." *Etmuller*, vol. i. p. 757.

L E C T U R E LXXV.

B D E L L I U M.

S E C T. I.

Bdelium. *offic.* Bdelium. *B. P.* 503. *J. B.* i. 2, 317. *Park.* 1571. Bdelium *offic.* *Dale* 349. Bdelium omnium autorum. *R. H.* 1844. *Βδελλιον*, Belchon, Malathram, Maldacon, seu Madelcon. *Schrod.* 713. Gum Bdelium. —This is a resinous gum, of a reddish-brown colour, like common glue, somewhat tough and semipelluced, of a warm bitter taste and pretty fragrant smell. It is brought here in lumps of different sizes.

“Ex Arabia, Media, & India ad nos transportatur.” *Dale*. “It comes by the way of Marseilles, or is imported by the African company.” *Savary’s Dict.* i. 313. “Bdelium fin comes from Aleppo, to the quantity of forty or fifty quintals annually; valued at sixteen or seventeen sols per pound.” *Idem.* iii. 431. “Sæpius cum myrrha in cistis permistum reperitur, & nonnunquam cum gummi senegal.” *Geoff.* ii. 624. “Colligitur ex arbore Americana spinosa.” *Herm. Cyn.* 635. “Omne Bdelium ex India.” *Hoffman.* 122.

Dale and *R. H. J. B.* &c. describe also a blackish Bdelium from Guinea, called sometimes Bdelium adulterinum. *Bauhinus in Matth.* p. 92. has six sorts of Bdelium. “Bdelium is a gum of a reddish-brown colour, deeper than myrrh, and of a tougher and more tenacious consistence, and difficultly dissolved in any liquor, coming nearest to myrrh in scent, but not so pleasant, and of a bitterish hot taste. This comes from Turkey and India, and is by much the best. There is another sort which comes from Guinea, that is whiter, in large round drops of little scent: but this is less esteemed.” *Miller’s Bot.* 79.

I do not find Bdelium in Hippocrates, nor in Theophrastus; but Dioscorides’s description of it agrees not badly with that of the shops. Some make the name originally Hebrew, vid. *Patrick’s Com. on Gen.* ii. 12. others Greek, “*Α βδελω* videtur esse *βδελλα, βδελλος, βδελλιον*, quod sanguisugam notat, & gummi sui generis.” *Hoffman* 122.

“Bdelium nonnulli Madelcon, alii Bolchon appellant. Lachryma est arboris Saracenicae. Probatur gustu amarum, translucentum, taurino glutini simile, pingue intima parte, & facile mollescens, lignorum ac sordium expers, in suffusione unguis odorati in modum odoratum. Est & alterum sordidum & nigrum, glandioribus glebis, in offas convolutum, quod quidem ex India advehitur. Desertur etiam a petra oppido siccum resinosum, sublividum, sed facultate secundum. Adulteratur admixto gummi, &c.” *Dioscor.* l. i. c. 80. p. 44. “Vicina est Bætriana, in qua Bdelium nominatissimum. Arbor nigra est, magnitudine oleæ, folio roboris, fructu caprifici, naturaque, &c. *Plin.* l. 12. c. 9. “Alii arbori myrrhiferæ eam valde similem faciunt. Et Thevetus affirmat se bis mille myrrhæ & bdelii feraces arbores in eadem sylva simul crescentes vidisse. De ea nihil certi traditur:

“An

“ An arbor lactescens, aculeata, foliis quernis, Americana, Bdellifera forte;
 “ sive arbor Bdellium ferens in America. *Pluk. Phyt.* l. 145. *Dale* 349.
 “ Quod Bdellium putatur, quia certo scimus, & a Rondeletio experimentis
 “ persuasi sumus, optimè viribus myrrhæ respondere, putamus illud myrrhæ
 “ speciem esse.” *Lob. Adv.* p. 428.

S E C T. II.

This agrees with myrrh in virtues; is called diaphoretic, diuretic, cathartic, and uterine, yea and pectoral too; and is commended inwardly in coughs, asthma, ulcers of the lungs, gravel, hæmorrhoids, &c. but more proper in cold and phlegmatic than hot diseases; in obstructions, than in overflowing of the catamenia and hæmorrhoids, &c. and outwardly as anodyne, discutient, and maturing, in plaisters, &c. It has been given to ʒj. But is now little used except in the mithridatium, and troch. cypheos pro mithridatio.

“ Calfacit & siccatur (N. aliis calf. 3. sicc. 2. aliis calf. 2. hum. 1.) digerit,
 “ discutit, sudorem movet. *Ufus præcip.* internus in tussi, ac pulmonum apo-
 “ stemate, calculo atterendo, urina cienda, mensibus immodice fluentibus, ut
 “ & in fluore uterino sistendo, foetu expellendo. Extrinsicus discutit hernias,
 “ mollit durities ac nervorum nodos, adèoque creberrimi usus est in emplastris
 “ stipticis. N. Contusum solvitur affuso vino, aqua calida, aut aceto. *Præp.*
 “ Pilulæ de Bdellio: ex Bdellio & myrobalanis. N. Sistunt fluxum hæmor-
 “ rhoidum ac mensium.” *Schrod.* 713. “ Purgat apud Arabas, pituitam dosi
 “ a ʒß. ad ʒij. quamvis Averroës in ʒj. stet. In usu sunt apud nos pil. de
 “ Bdellio majores Mesue. Videant boni an vera sit laus earum in cohibendis
 “ mensibus.” *Hoffman*, p. 124.

It is pretty bitter, odoriferous, a resinous gum, and every way much resembles myrrh. “ Sapore subamaro est, multum tamen a myrrha relinquitur:
 “ odorem non insuavem spirat, flammamque concipit, & quidem pertinacem
 “ licet cum crepitu. . . Exterior facies glebarum, aliquando myrrham vulga-
 “ rem refert, coloris ferruginei, sed non tam intensi amaroris.” *J. B.* i. 2, 317.
 “ Saporis acris, pinguis, lenti, amaricantis, aromatici; odoris fragrantis.”
Herm. Cyn. 635. “ Coloris ex ferrugineo nigricantis, ad myrrham accedentis,
 “ cujus saporem & odorem æmulatur.” *Dale* 349. “ Nobis compertum est
 “ crebro usu, utramvis (Myr. & Bdel.) ciere menses, mollire, &c.” *Lob. Adv.*
 429. *Mr. Geoffroy* gives no analysis of it, but an extraordinary note stolen
 from *Hoffman*, p. 123. § 8. viz. “ Insigniter etiam discutit, aperit, atque ab-
 “ stergit, sed alia atque alia ætate: si discutere velis, mediæ ætatis sumendum
 “ est: si abstergere tantum, quo vetustius eo melius.” *Geoff.* ii. 625, without
 naming his author. “ De facultatibus scribit Galenus (6 Simpl. &c.) haberi
 “ vim emolliendi, & eam quidem potentiorē, dum recens est. . . Consenti-
 “ unt Serap. Avic. Aver. Ex quibus quis ulterius colligerit, etiam insigniter
 “ discutere, aperire, & abstergere, sed alia atque alia ætate magis, minus.
 “ Si emollire quis velit tantum, recentissimum & pinguißimum, quod idem
 “ est mollißimum, aptius erit: si discutere etiam, aut accipiat mediæ ætatis,
 “ aut recenti addat vetustum: si discutere et abstergere tantum quo vetustius
 “ eo commodius.” Thus *Hoffman*. But this is only trifling.

EUPHOR-

EUPHORBIIUM.

S E C T. I.

Euphorbium. *offic.* Euphorbium. *B. P.* 496, & omnium authorum, is a resinous gum, in small friable yellowish drops, of a most acrid caustic taste, and no smell; brought from Africa and the East-Indies; being the proper concreted juice of a plant of the same name, supposed to be the

Schadida calli. *H. Mal.* vol. ii. p. 81. t. 42; Euphorbium verum antiquorum, Schadida calli horti Malabarici. *H. Amst.* i. p. 23; *R. H.* 873; *B. J.* 259; Euphorbium Indicum, opuntiae facie, caule geniculato, triangulari. *Breyn. Prod.* ii. 24; *H. Ox.* iii. 345; tithymalus aizoides triangularis, nodosus & spinosus; lacte turgens acris *Pluk. Alm.* (390. *H. Cl.* ?) 379. *Fl. Mal.* 168; *C. Commel. prælud.* p. 21; T. Indicus spinosus & angulosus, lacte turgens acris. *H. Beaum.* 41; Euphorbium verum. *I. Commel. in H. Mal.* 2. p. 82; (scribunt Boerh. in Indice, & Commel. in prælud. Scadida-calli, non Schadida-calli.) Euphorbia aculeata triangularis, subnuda, articulata, ramis patentibus. *H. Cliff.* 196. Euphorbium trigonum spinosum rotundifolium, *Aët. Reg. Par.* anno 1720. The Euphorbium plant or tree.

This plant, *C. Commelin.* in Præl. p. 9—17. endeavours to prove to be the species which yields the Euphorbium off. & antiquorum; as agreeing with what the ancients have left us concerning either this plant or gum; among which juice parts of the plant are sometimes brought hither. “Addamus denique (says he) quod frustra ipsius Scadida-calli inter Euphorbium patrum è “Barbaria sunt allata, & quod ipse Scadida-calli plurimas capsulas feminales “inter gummi invenerit.” *Prælud.* p. 12. “Jo. Commelinus hanc plantam “veram esse Euphorbium se exinde scire scribit, quod sibi frustum hujus cum “gummi ex Barbaria fuerit allatum, & deinde invenerit complures capsulas “females, flores & frustra plantae in saccis coriaceis inter Euphorbium.” *R. H.* 873. But perhaps the Euphorbium. *Dod.* 378. *B. P.* 387. *Ger.* 1178. *Park.* 227. (Euphorbium vulgò sed falsò creditum. *R. H.* 872. Euphorbium cerei effigie, caulibus crassioribus, spinis validioribus armatum. *Breyn. prod.* 2. *H. Ox.* iii. 345. *B. J.* 258. Euphorbium cerei effigie. *H. Am.* i. 21. Tithymalus Mauritanicus, aphylos, angulosus & spinosus, ex quo Euphorbium officinarum. *H. L.* 598. The poisonous gum, thistle-gum, the burning thorny plant called Euphorbium, *Park.*) yields the same or a like juice; as do some others of the same genus.

“I believe the Euphorbium we now use is taken from more species of plants “than one: and I am credibly informed by a very curious gentleman, who “lived many years in the Canaries, that the greatest part of the Euphorbium “used in England came from thence, and is produced from the Euphorbium “tetragonum & pentagonum spinosum Canarinum.” *B. J.* (258. *i. e.* Tithymalus aizoides, fruticosus, Canariensis, aphyllus, quadrangularis, & quinquangularis; spinis geminis, aduncis, atro-nitentibus (atro-virentibus. *B. J.*) armatus. *H. Amst.* ii. 207. *Com. præl.* 20. Tithymalus quadrangularis spinosus, seu spinis geminis aduncis, ex eadem sede ortis, armatus, succo lacteo acerrimo

rimo turgidus. *H. Beaum.* 41.) “ And by carefully looking over some of this “ drug in a shop, I found several spines amongst it, which exactly agreed with “ those of that plant.” *Miller’s Dict.* vol. 1. *Art.* Euphorbium.

“ Euphorbium Libyca arbor est, sæculæ speciem habens (*εὐφορία*) quæ “ in Atlante Mauritanæ monte nascitur, acerrimo referta liquore. . . Eligen- “ dum translucens & acre. Difficile autem est quod e gustu petitur saporis “ experimentum; quippe cum levi linguæ contactu, os accensum diu deteneat, “ adeo ut quicquid deinde exhibetur, Euphorbium esse videatur. Cæterum “ id, Juba in Libya regnante, primum inventum fuisse in confesso est.” *Dioscor.* l. 3. c. 96. p. 214. “ Invenit & patrum nostrorum ætate rex Juba “ quam appellavit Euphorbiam, medici sui nomine & fratris Musæ, a quo “ D. Angustum conservatum indicavimus. . . Sed Jubæ volumen etiam extat “ de ea herba, & clarum præconium. Invenit eam in monte Atlante.” *Plin.* l. 25. c. 7. p. 636. “ Observat tamen Salmasius, (*Tractatu de Homonymis*) “ *Εὐφορίας ἀναγής* mentionem esse apud authorem longe Jubâ antiquiorem, “ Meleagrum sc. poetam æqualem Menippi cynici, in quodam poemate Græco “ inscripto *στεφανος*.” *Geoff.* ii. 626. “ Adfertur ex Africæ regionibus a mari “ remotissimis per Selam urbem, vulgo Salé, in Barbariam; unde in Europam “ transvehitur.” *Ibid.*

S E C T. II.

It is a violent cathartic and emetic, more dangerous than the spurge; called a hydragogue; and is commended in dropsies, quartans, and paralytic cases; but it is too virulent for inward use. Outwardly it inflames and ulcerates, and so may do service in errhines, clysters, sinapisms, ointments, &c. in fixed pains, palsies, lethargies, apoplexies, and carious bones.

“ Insignem quidem vim obtinet serum ac aquas ex toto corpore purgandi. “ Verum enimvero non sine violentia ac molestia, quam præter substantiæ “ proprietatem malignam, vi inflammandi exerit, calidum enim est quarto “ gradu. Dosis a gr. v. ad x. *Præp.* 1. Correctum Euphorbium (quod fit “ quatuor modis). 2. Extractum Euph. paralyti, arthritidi, spasmo, hydro- “ pique conducit; pituitam nervis impactam expurgando ducit. 3. Oleum “ stillat. 4. Oleum commune. 5. Hieræ Logadii; pil. de Euphorbio, & “ sternutatorium Colon.” *Schrod.* 780.

1. If tasted it causes a most violent heat in the mouth and throat, which continues ten or twelve hours; and in the nose it causes troublesome heat, sneezing, and sometimes bleeding; so that it must be cautiously powdered. *vid. Matth.* p. 585. “ Saporis est acerrimi, exurentis, nauseosi, odoris nul- “ lius. Vix se patitur cicurari, quod quidam tentant solvendo in sp. vitrioli, “ aceto, & iterum inspissando; subsequente tamen nonnunquam, ubi exhi- “ betur, inflammatione ventriculi, & intestinorum excoriatione.” *Herm. Cyn.* p. 681. “ Saporis acerrimi, exurentis, nauseosi, odoris nullius.” *Dale* 213. *Geoff.* ii. 626. “ Saporis est acerrimi, sicut & odoris, præcipue dum teritur, “ & inducit sternutationes violentas, aliquando inflammationes oculorum, & “ narium hæmorrhagias; quare dum pulverisatur strophilo superne tegunt “ mortarium.” *Nuch. Belg.* 130. — 2. It melts and flames in the fire; “ does “ not

“ not dissolve in water; oils, sp. terebinthinæ, sp. vini, dissolve but a small
 “ portion of it: wine, vinegar, dissolve not much more; sp. nitri, sp. vitrioli,
 “ penetrate it, without ebullition, and soften it, but do not dissolve it; oleum
 “ tartari takes a strong tincture from it.” *Lem. Chym.* p. 771. — 3. “ Eu-
 “ phorbii electi ℥xxiv distilled per retortam gave spiritus saporis acris ℥iv.
 “ olei nigri foetidi ℥xiv. The remaining carbo contained an alkaline salt.
 “ The Euphorbium in substance appeared to be more acrid than any of its
 “ separated principles.” *Id.* p. 773. — 4. Neither Dioscorides nor Galen take
 any notice of the cathartic quality of Euphorbium; but Pliny (l. 26. c. 8.)
 does; as do also Aëtius, Paulus, and the Arabians. “ Græci recentiores
 “ & Arabes insignem serum ex toto corpore trahendi virtutem ipsi tribuunt.”
Geoff. ii. 629. But all make it excessively acrid; upon account of which the
 internal use of it is now generally condemned: and some are for banishing it
 the *M. M.* as is done at *London*. But certainly it is a powerful attractant; and
 since not the ancients only, but many famous moderns also, as Fallopius,
 Hildanus, Etmullerus, Wiseman, Albinus, Heister, &c. commend it much
 in carie ossum, I think it deserves to retain its place still.” *Vid. Lewis's Ph.*
p. 31.

“ *Analyti chymica Euphorbii lbij. exhibuerunt humorum ℥viii℔. gr. lxxvj;*
 “ *olei ℥xxj. zij. gr. xvij; carbonis ℥vij. zij, unde cinerum ℥ij. zij, ac inde*
 “ *salis fixi alcali zij. gr. lvij. (ergo terræ zij. gr. xiv.) et jactura fuit zij. zvj.*
 “ *gr. lx.*” *Geoff.* ii. 628. This differs not a little from Lemery's analysis:
 for, according to this, Euphorbium ℥xxxij should yield only humorum ℥vj,
 but olei ℥xxj.

How to correct it, so as to make it safe inwardly, I think a needless inquiry:
 because if its acrimony be removed, its nature is destroyed; and where that
 is not wanted, it ought not to be used: and if it is wanted, it is best corrected
 by diminishing the dose, and diluting it well. But the dose is not well ascer-
 tained. *Datur ad ob. iij. secundum Plinium, (l. 26. c. 8.) Aëtium, (serm. 3.*
c. 54. p. 127.) Actuarium (l. 5. p. 273. d.); ad gr. x. Sennert. Fern. Heurn;
ad gr. viij Horstio, Geoffroio. “ *Cum parum tutæ sint correctiones, cum*
 “ *Ludovico, Hoffmanno, Wedelio, Timæo, et aliis, ab hoc cathartico absti-*
 “ *nendum esse censemus; vel saltem in illis tantummodo affectibus usurpan-*
 “ *dum esse, in quibus viscerum membranæ paralyti affectæ, non nisi valen-*
 “ *tioribus et irritantibus medicamentis commoveri possunt, ut in soporosis*
 “ *affectibus, lethargo, apoplexia, paralyti: tumque a gr. ij. vel iij. ad vj.*
 “ *vel viij. Serapio et Avicenna observant zij pondere haustum interficere*
 “ *trium dierum spatio, erosio ab eo intestinis et ventriculo.*” *Geoff.* ii. 629.

G A M B O G I A.

S E C T. I.

Gambogia, Gutta gamba, Gummi gutta. *effic.* Succus laxativus ex flavo
 rufescens. *B. P.* 497. Succus undecimus, Ghittajemon appellatus. *Clus. Exot.*
 82. Ghitta Jemori, Gutta Gamandra, Gumma gotta, Gutta gemau, Catta-
 ganma

ganma vel Gemu, Gummi Peruanum seu de Peru, de Jemou, de Gemandra; aliis Succus Cambici vel Crambici. *Schrod.* 781. Gummi de Goa, Gummi de Peru purgans, Succus Indicus purgans, Scammonium Orientale & Chrysopum. *Mem. Acad.* 1701. p. 172. Cambogium offic. *Dale* 327. Gummi Gutta (cum aliis 20 nominibus) offic. *Geoff.* ii. 679. Cambugio, quibuldam catharticum aureum. *Park.* 1575. Gamboge—is a hard, clean, gummy resin, of a deep yellow colour, of little taste at first, (though afterwards it raises a heat and dryness in the throat) and no smell. It is brought from the East-Indies in round flattish cakes, or in rolls; and is said to be the juice of the tree, called Carcapuli, *i. e.*

Carcapuli Acoſtæ. *Clus. Exot.* 286. Carcapuli Acoſtæ, fructu malo aureo æmulo, *B. P.* 437. *Pluken. Alm.* 81. Arbor Indica quæ Gummi guttæ fundit, fructu acido, sulcato, mali magnitudine. *Fl. Mal.* 66. Coddam-Pulli, seu Ota-Pulli. *H. Mal.* i. 41. t. 24. Carcapuli. *J. B.* i. 105. *Park.* 1635. *R. H.* 1661. The Indian yellow orange of Malabar. *Park.* “Ex faucio enim trunco arboris (Coddam-pulli. *H. Mal.*) manat humor flavescens, qui collectus purgatur a facibus solutione in aqua pluvia, & inspissatione, (sed lenissimo igne, alias nigrescit) in massam uniformem flavescentem; saporis primum resinosi, hinc acris caustici. Transfertur potissimum ad nos ex China, ubi affabre norunt tractare.” *Herm. Cyn.* p. 684.—It is also said to be the produce of another species of Carcapuli, (if that be not a variety only) viz.

“Carcapuli, *Linschot. Ind. or par.* 4. Arbor Indica, Gummi Guttam fundens, fructu dulci rotundo, Cerasi magnitudine. . . Ghoraka Cingh. *Herm. Mus. Zeyl.* 26. Binæ hæ arbores ex trunco inciso Gummi Gutta fundunt, præstat autem illud quod ex posteriori, ut sentit Hermannus.” *Dale* 327. Altera species dicitur Carcapulli *Linschot.* Carcapulli de Bry. Kanna-Ghoraka, *i. e.* Ghoraka dulcis Cingalensibus, *Hermans in notis ad H. Malab.* Differt a priore, flore & fructu dulci, rotundo, cerasi magnitudine, licet in reliquis conveniat. Binæ illæ arbores, inquit P. Hermans, ex trunco inciso gummi Gutta fundunt. Præstat autem illud, quod ex Kannâ-Ghorakâ; mitius enim est. In Cambaiâ, Chinâ & insulâ Ceylon crescunt.” *Geoff.* ii. 681.

I shall pass over the various opinions or conjectures of authors as to the original of this drug, (vid. *B. P.* 497, &c.) and only observe, that according to Bontius it is got from a plant like the large scandent “cithymali species, vel esula Javania; nisi quod non tam alte excrescat; ita ut ferme solo colore succi hi inter se differant,” and grows in great plenty in Cambodja, a country bordering on China; which De Syen, (and from him Dale, Miller, &c.) makes the common Gamboge. vid. *Bont. Med. Ind.* fol. 28. a “confundi autem non debet Gummi Gutta hic descriptum (inquit De Syen in Annot. suis ad *H. Mal.* tom. 1.) cum vulgari, quod ab *Esula Indicæ affini planta* colligi testatur *Jac. Bontius* in *Hist. Nat. & Med. Indiæ Orient.* l. 6. c. 57. & ab Indis vocari *Lonam Cambodja*, quod in Cambodia, vicina regno (Chinæ) Indiæ provincia, frequenter proveniat.” *Dale* 327. “Verum Bontius ex aliorum relatione loqui videtur, nec plantam Cambogium fundentem unquam vidit; siquidem illius succi origo ab arboribus duabus Carcapulli nuncupatis deducitur.” *Geoff.* ii. 680.

If this juice be different from the gummi ad podagram *Monard.* (*Clus. Exot.* p. 331.) *Clusius* is the first who mentions it: and he had it an. 1603 from *Peter Garel* of *Amsterdam*, where it had been lately brought from China “cum a Jacobo Van Neck, classis profecto, tum ab aliis qui ipsum comitati fuerant.” *Exot.* p. 82. “Adfertur ex Sinarum regione. Videtur esse gummi contra podagram Monardi.” *Schrod.* 782. which gum was purgative, and had neither taste nor smell, as *Monardes* writes; but he mentions not its colour.

S E C T. II.

Gamboge is a strong and violent cathartic, and sometimes emetic; called a hydragogue; and commended chiefly in the dropsy, asthma, leprosy, and Venereal disease.

“Expurgat per superiora & inferiora præcipue humores serosos & aquosos; tum quoque omnem saburram vitiosorum humorum ex toto corpore educit. Hinc usus ejus creber est in hydrope, feбри, scabie, pruritu & sim. Dosis a gr. v. ad xiv. *Præp.* 1. Gitta jemu correctum sp. vitrtoli. 2. Extrac- tum S. magisterium, cum sp. vini. 3. Magisterium S. Clossæi. Integrum tractatum de Gitta Jemou scripsit Jo. Petrus Lottichius.” *Schrod.* 782.

1. It appears to the taste almost insipid at first; yet afterward it discovers its acrimony in the throat. “Initio, ob coloris affinitatem & facultates, aloës succum esse existimabam. propterea aliquantulum degustabam; nullam tamen amaritudinem deprehendebam, sed post temporis momentum, magnam acrimoniam in gutture mihi excitabat, ut mihi suspicionem moveret euphorbii succum esse posse.” *Clus. Exot.* 82. “Saporis est acris nauseosi.” *Dale* 327. “Saporis est primo dulcis, deinde acris.” *Nucl. Belg.* 132. “It has no smell, and but little taste.” *Miller’s Bot.* 209. “Odoris nullius, saporis fere expers, saltem cum in ore detinetur, nullum alium saporem primo refert, quam gummi Arabicum, sed paulo post in faucibus, levem relinquit acrimoniam cum quadam siccitate.” *Geoff.* ii. 679. “It appears at first insipid on the tongue, but soon after becomes sensible in the throat by its acrimony, and an insupportable dryness.” *Bolduc, Mem. Acad.* 1701.—

2. Although it easily dissolves with water into a yellowish milk, yet it soon precipitates; and really is, for the far greatest part, a resin or sulphur: for it melts and flames in the fire; dissolves within about a sixth part in sp. vini, and is then precipitated by water; and is intirely dissolvable in a solution of sal tartari, except a few terrestrial fæces. The resin & resinous tincture are more violent than the substance; but the residuum is diuretic only. *Bolduc*, l. c. Spirits salis ammon. dulcis dissolves it intirely. *N. Dispens.* p. 132.—

3. It is a violent medicine, and to be used cautiously, and as a stimulus only. “It is a most powerful cathartic & emetic hydragogue, which should be used with great precaution, and only after having well corrected its malignity, and curbed its violence.” *Bolduc*, l. c. I still am of his opinion: though others have much commended it, as safe as well as efficacious. “Humores imprimis serosos ac biliosos tenues per superiora & inferiora evacuat, idque cito, non diu moram in corpore trahens, & absque molestia aut torminibus. Hinc ejus usus creber est in hydrope, cachexia, tussi, dyspnoea, asthmate, ictero,

“ iſtero, catarrho, arthritide, ſcabię; & ejuſmodi morbis. Quidam in illius
 “ uſu timidi primum fuerunt, ejus violentiam reformidantes; ut G. Hortſius,
 “ qui § 9. *Epistol.* ab ejus uſu, ne per aliorum dolores experimenta faceret,
 “ abſtinendum eſſe putavit. Idem tamen poſtea, mitius de illo ſentire coepit.
 “ Alii felicem experti ſucceſſum, larga manu illud exhibere non dubitaverunt,
 “ etiam pueris, ſenibus, prægnantibus & phthiſicis: quos inter Phil. Hech-
 “ ſterterus, qui intra novennium ad libras plures ægris innumeris præſcripſit.
 “ Revera qui hoc medicamentum caute & opportune adminiſtrare norunt,
 “ illud commodi in eo deprehendunt, quod ſit ſaporis & odoris expers; parva
 “ doſi exhibeatur, intra brevi temporis ſpatium operationem ſuam exerat, &
 “ quod ſuccos viſcidos & tenaces, in quacunque corporis parte ſtagnantes &
 “ adhærentes potentiffime diſſolvat, eoſque qui in ventriculo ſunt per vomitum
 “ expellat, cæteros vero per inferiora uberrime propellat.” *Geoff.* ii. 684.
 Well aſſerted, but badly proved! However, the ſmallneſs of the doſe, toge-
 ther with the ſtomachi ſubverſio, vomitio et ſuperpurgatio, which it ſometimes
 cauſes, as he owns, ſufficiently evince that it is cautiously to be uſed; and alſo
 that it acts more by its ſtimulus than any diſſolving quality; eſpecially ſince
 its operation is ſo ſoon over.

“ Analyſi chymica ex Gummi Guttæ lbij. prodierunt humorum 3vj. 3vj.
 “ gr. xxiv; olei 3v. 3vj. gr. lx. Carbo pendebat 3xj. 3vj; unde cinerum 3j.
 “ 3v. gr. xxiv, ac inde ſalis fixi falſi gr. xxiv. (e terræ 3j. 3v.) et jaçtura
 “ fuit 3viſ. gr. lx.” *Geoff.* ii. 682. whoſe inferences I think chimerical.
 N. One pound (or—3xvj.) afforded *Mr. Bolduc* gr. xxxvj. of fixed ſalt. *Vid.*
Mem. l. c.

S E C T. III.

It is very differently doſed in authors. I never uſed it; but think gr. iv.
 enough at firſt; though the common doſe being to gr. x. pil. de gambogia 3j
 contains about gr. iij of Gamboge.

“ Doſis a gr. xv. ad xx.” *Cluſio*; “ ad gr. xij.” *Sennerto*; “ a gr. v. ad xv.”
Horſio et *S. Paulli* 588. “ Datur a 3ß. ad 3j. Poſteſt et delicatulis dari, licet
 “ tormina excitet, hoc enim omnibus fere accidit purgantibus.” *Herm. Cyn.*
 684. “ Doſis ab initio fuit gr. vij. vel viij: poſtea ad xv ventum eſt, imo ad
 “ 3j, quin 3j. vid. *Freitag.* 2. *Purg.* 42. Com. noſter in *Diſp.* vidit gut ij.
 “ Olei (*ſc.* Ricini) feciſſe ſuperpurgationes.” (An?) *Hoffman*, p. 19. “ Doſis
 “ 3ß. 3j. 3ß. *Ph. Bat.* “ Americani, referente Nicolas Monarde, illius gummi
 “ fragmentum, nucis ponticæ magnitudine, ſeu circiter 3ij, in aquei cujuſvis
 “ liquoris 3ij. per noctem integram macerant, poſtea mane percolant et bibunt.
 “ . . . Præſcribitur a gr. ij. v. vel vij. ad xv ad ſummum licet *Cluſius* doſim ad
 “ gr. xx. extendat. Sæpius Gummi Guttæ exhibui a gr. ij. ad iv. abſque
 “ vomitu. Nonnulli vero ex gr. iv. ventriculi perturbationem paſſi ſunt, ſed
 “ pauci. Eiſdem vero eadem doſis ſi per plures dies reiteretur, poſt primam
 “ aut alteram vicem, ad vomitum non amplius provocat. A gr. iv, ad viij,
 “ vel x, per ſuperiora et inferiora blande atque copioſe et abſque violentia
 “ purgat: nec ea doſi exhibitum correçtione eget, ſi præſertim copioſo liquore
 “ diluatur et extendatur. Si ſub forma boli vel pilularum exhibeatur, faci-
 “ lius vomitum excitat, rarius vero cum mercurio dulci conjunctum. . . .

K k k 2

“ Quibus

“ Quibus autem facilem vomitum natura negavit, et qui ad vomendum sunt infueti, ab eo abstinere debent.” *Geoff.* ii. 685. Is it not then a very rough if not a virulent medicine?

Some correct it by acids, others by fixed salts, others by aromatics, all to little purpose. For the best way to prevent its ill effects is to use it as a stimulus, in a very small quantity; and order it only to such as need it and can bear it.

GUMMI AMMONIACUM.

S E C T. I.

Gummi Ammoniacum. *offic.* Ammoniacum. *B. P.* 494. *J. B.* iii. 2, 54. *R. H.* 1844. Gum Ammoniacum. *Park.* 1544. Ammoniacum. *Matth.* p. 587. Gum Ammoniac.—This is a resinous gum, brought to us in lumps composed of drops, commonly of different colours, (white, yellow, brown) with bits of sticks, straws, seeds, and other impurities mixed with it; of a viscous, nauseous, and bitter taste; and strong smell, to me not disagreeable. At first it is white; but turns yellow and then brown by age.

It is brought from Turkey, and also from the East-Indies; but what plant affords it is still unknown in Europe. “ Ab India orientali & aliunde ad nos defertur.” *Dale* 119. “ It is brought to us from Turkey and India.” *Miller’s Bot.* 30. “ It comes from Aleppo and Smyrna.” *Savary’s Dict.* iii. 503. “ Ex Alexandria Ægypti affertur.” *Geoff.* ii. 602.

“ Ammoniacum & hoc succus est ferulæ, quæ in Libya juxta Cyrenen gignitur. Totus cum radice frutex Agasyllis appellatur. Maxime probatur quod bene coloratum est, ligni & calculorum expers, thuris granorum glebarumve similitudine (λιθανωτιστον τοῖς χονδραῖς) sincerum ac densum, nulla sorde spurcatum, castoreum odore imitans, & gustu amarum: hoc Σραυσμα vocatur (*i. e.* fragmentum) &c. “ Vid. *Dioscor.* l. 3. c. 98. “ Alterum quod terræ calculorumve est particeps, φυραμα, *i. e.* mistura gignitur vero succus is in Libya, juxta Hammonis templum (κατα Ἀμμωνα) e ferulacea stillans arbore.” “ Ergo Æthiopiæ subjecta Africa Hammoniachi lachrymam stillat in harenis suis, inde & nomine etiam ab Hammonis oraculo, juxta quod gignitur arbor, quam Metopion vocant, resinæ modo aut gummi. Genera ejus duo. Thrauston, masculi thuris similitudine, quod maxime probatur. Alterum pingue & resinofum, quod Phyrama appellant. Adulteratur harenis velut nascendo apprehensis. Igitur quam minimis glebis probatur, & quam purissimis. Pretium optimi in libras asses xl.” *Plin.* l. 12. c. 23. Galen also, *Simpl.* l. 6. fol. 42. *H.* makes it the ὄπος of a certain ferula, which, by what is sometimes found in it, *viz.* “ semen foliaceum anethino majus, & plantæ fragmenta nervosa sed mollia,” *J. B.* it seems really to be: and no more we know of it, although it was in use in Hippocrates’s time. vid. *L. de M. Mul.* l. 2. p. 670. l. 27. if ours be the same with the Ammoniacum antiquorum, as probably it is, though some think it is not. vid. *J. B.* iii. 2, 54. “ Planta vero nascitur in ea Africæ parte quæ Ægypto ad occasum adjacet, quæque hodie dicitur *Regnum de Barca*, in quo fuit olim templum celeberrimum Jovi Ammoni dicatum, unde gummi nomen.” *Geoff.*

Geoff. ii. 603. for which he has only the authority of the ancients, so far as I can find; Cairoan, anciently Cyrene, standing in that country.

“ Est substantia gummosa & resinosa, ex variis densis solidisque grumis modo flavescentibus modo lacteis, qui optimi, collectis ex ferula ammoniacifera, quæ mole fere arborem æquat & lactescens est, splendidis & nitidis in glebam coactis, dum manibus tractantur lentore mollescentibus; saporis acris, amaricantis, viscosi, lenti & paululum nauseosi; odoris fragrantis, gravis, alliariis fere, aut castoreum utcumque æmulantis.” *Herm. Cyn.* 630.

S E C T. II.

This is emollient, attenuant, and laxative, or gently cathartic; called pectoral and splenic; and commended inwardly in coughs, asthma, phlegmatic stuffings of the lungs, obstructions of the hypochondriac viscera, spleen, vapours, &c. and outwardly for hard tumors, pains, &c.

“ Calfacit 2. siccatur 1. emollit, attenuat, resolvit, digerit, maturat, attrahit valide, ut quoque spinas carni infixas eliciat. *Usus præcipuus* est in doloribus arthritidis, in resolvenda mucilagine tartarea, viscosa, crassa ac contumaci pulmonum, mesenterii, & hinc in obstructionibus contumacibus, lienis, epatis, uteri, & in calculo. Extrinsicus in scirrhis, panis, tophisque juncturæ, in scrophulis, aliisque tumoribus durioribus resolvendis, &c. Dosis a ʒj. ad ʒj. *Præp.* 1. Ammoniacum depuratum. 2. Oleum stillatitium. 3. Oleum cæruleum S. Clossæi. 4. Pilulæ de Ammoniaco. 5. Extractum resinosum. 6. Extractum viscosum.” *Schrod.* p. 709.

1. It is viscid, nauseous, bitter, and strongly odoriferous; melts and flames in the fire, but sparkles and crackles; and dissolves in aqueous fluids, as well as in spirits. Water, wine and vinegar turn it to milk. . . . “ Sapore est amaricante, odore galbani virosiore. Sub dentibus facile deducitur, sibi coherens, magisque albescit. Carbonibus injectum in flammam exardet.” *J. B. vid. Herman,* § 1.

“ Odoris est nauseosi, saporis amari, acris, ingrati; accensum claram dat flammam, in calore facile mollescit; rumpitur in minutissimas partes dum pistillo tunditur et in aqua prompte dissolvitur et fit lac.” *Nucl. Belg.* 126. “ Sapore primum dulci, postea amaricante; odore fragranti, ad galbanum accedente, sed virosiore.” *Geoff.* ii. 602. — 2. Ammoniacci ʒxvj distilled per retortam gave phlegm. ʒvj; spir. acris ʒiij. ʒvij; olei nigri foetidi ʒvj. Carbonis fuere ʒiv. ʒvj. (so that ʒv. were evaporated). The spirit did not effervesce either with sp. vitrioli, or ol. tartari, but reddened a tincture of turnsole, and also muddied a solution of sublimate. *Vid. Lem. Chem.* 768.

“ Analyti chymica ex Ammon. ʒij. distillaverunt phlegmatis (subacidi ʒvj. ʒj. gr. xxxiv. phl. urinosi ʒj. ʒvj. =) ʒvij. ʒvij. gr. xxxiv; olei ʒix. ʒvij. gr. xlvij. Carbo erat ʒvij. ʒvij; unde cinerum ʒj. gr. xij, ac inde salis fixi gr. lxj. (e terræ ʒvij. gr. xxij.) & jactura fuit ʒv. ʒij.” *Geoff.* ii. 603. How vastly different from Mr. Lemery’s analysis! Is either right? — 3. Externally applied it warms and comforts the parts, eases pains, and discusses or suppurates, according to the nature of the tumor; so that it is neither safe in the gout nor in malignant scirrhi. In general its virtues depend on its stimulus.

lus and lubricating visciditv, probably more than on any dissolvent quality in it, for it cannot be called saponaceous, though antiseptic and antacid it may be. "Ammoniacum partes duras emollit, humores crassos incidit, lentos ac "tenaces resolvit," (may not it be said more properly *tenuēs & acres incrassat, involvit?*) "collectos discutit. Asthmaticis prodest, cruda pulmonum tubercula dissipat, hepatis, mesenterii, lienis & uteri scirrhus resolvit, menses suppressos promovet, obstructions aperit, articulorum tophos discutit, & "alvum nonnunquam subducit." *Geoff.* ii. 603. A wonderful medicine indeed, if we believe Geoffroy!

S E C T. III.

It is given to ʒj. in any form. Straining is not always necessary, and perhaps sometimes prejudicial. It is an ingredient in our oxymel pectorale, pil. euphraticæ, pil. ecph. chalybeatæ, pil. gummosæ, mercuriales, laxantes, pectorales, scilliticæ, & stomachicæ; empl. de cicuta cum ammoniaco, E. diachylon cum gummi, E. mercuriale; cataplasma discutiens: and a chymical oil is drawn from it. A solution of it is much used as a pectoral.

"Ejus substantia intus exhibetur a ʒß. ad ʒj. sub forma emulsionis, electuarii, boli, vel pilularum. Extrinsecus in scirrhis, tophis, sciophulis & tumoribus durioribus aut contumacibus resolvendis adhibetur. R. Gum. "Amm. electi ʒß. Dissolve in mortario cum aq. hyssopi ʒiv. & vini albi ʒij. "Colatura sit pro duabus dosibus in asthmate." *Geoff.* ii. 604. "Si glebæ "fordibus inquinatæ fuerint, ab illis purgantur, solvendo in aceto, percolando " & inspissando: sed hæc præparatio multum de partibus ejus tenuibus & volatilibus aufert. *Ibid.* p. 603. vid. *Lemery Chym.* p. 767. "The strained "gum of the shops is a grievous abuse, being a composition of ingredients "much inferior in virtue and price." *Lewis's Pharm.* p. 7. "Ammoniacum "præparatum solvatur in aceto, aut aqua, coletur, & leni calore fiat evaporatio." *Ph. Edinb.* 1744. in which *aut aqua* was added to the former receipt. "Ammoniacum dissolvitur optime in spirituosus & oleosis." *Nucl. Belg.* 126. R. Ammon. electi ʒß, aqua hyssopi ʒiv. F. emulsio. Add. p. r. n. oxymel scillit. ʒß. Capiatur cochl. j. sæpius in asthmate ab infarctu pulmonum phlegmatico. Vid. *Gum. Ammoniaci purificatio. Ph. Lond.* p. 26. The Lac Ammoniaci of this Pharmacopœia is G. Amm. ʒij, dissolved in aqua pulegii ʒßß.

G. A S S A F O E T I D A.

S E C T. I.

Asa foetida. *offic.* Asa foetida. *B. P.* 499. *R. H.* 1843. Asa foetida. *Park.* 1569. Asa foetida nostras officinarum. *J. B.* iii. 2, 133. Alticht five Antit Arabibus; Imgu aut Imgara Indis. *Garz. Clus. Exot.* 152. Alticht seu Asa foetida, Javanis & Malaus Hin dicta. *Bont. in Garz.* fol. 3. A Scorderasarum, ἀσα φητιδα Italicè dictum. *Nicol. Myr. Antidot.* c. 27. p. 365. D. Hingseh aut Hling. *Kæmpf. Aman. exot. Fasc.* 3. *obs.* 5. p. 535. Asa foetida.—

This is a resinous gum (or gum rosin) brought from Persia, by Turkey, or the East-Indies, in lumps composed of drops of different colours commonly, as whitish, pale, brown, though all at first white: it is pretty free from dross, and of an acrid, bitter, disagreeable taste, and strong garlic smell.

Notwithstanding some famous travellers, as Bontius, *l. c.* Mandelsto, *Harziz's Col.* ii. 127. Garzias, *l. c.* &c. have said not a little on this subject, yet we knew little or nothing of the *Asa foetida* plant, till *Engelbertus Kämpferus* favoured the world with a particular description of it, with an account how, and where, the juice is collected, in his *Amen. Exot. politico physico-medicearum Fasciculi v. Lemgoe 1712.* in 4to. He calls the plant umbellifera levisticum affinis, foliis instar pæoniæ ramosis; caule pleno, maximo; semine foliaceo, nudo, solitario, brancæ ursinæ vel pastinacæ simili; radice Asam foetidam fundente. *Amen. Exot.* p. 535: and says it grows only in Persia, where it is called, as well as the gum, *Hingeseh*, and in India *Hing*; but adds, "Ustacius tamen est vocabulo Hingeseh plantam Hing lachrymam exprimere ipsam;" that it flows from the wounded root only, is at first of the colour and consistence of cream, (but turns brownish and viscid in the air) and incomparably more vehemently fetid, while recent, than any that comes to Europe. "Affirmare aulam drachmam unam, recens effusam, majorem spargere foetorem quam 100 libras vetustioris, quem siccum venundant aromatarum nostrates. Cherasanensis ut plurimum pinguior & mollior, pellibus caprinis & ovinis involuta; larenis aridior, faccis ex foliis sylvestris palmæ textis transmittitur." Vid. p. 535—552: whence *Mr. Geoffroy* transcribes eight of his pages on this article, viz. 611 ad 619. tom. 2. N.B. It is Hingeseh, not Hingisch, as *Dale*, *Miller*, and *Douglas* write it.

Many are of opinion that the *Asa foetida* is the *ῥπος*, or *ῥπος σιδήρις* of the ancients; and others positively deny it. Vid. *J. B.* iii. 2, 129—136. for the arguments of authors on both sides; and *Bod. in Theoph.* p. 591—599, who declares expressly against it; whom *Mr. R.* seems to join with. Yet *Mr. Geoffroy* is very clear that the "silphium, laser, & succus Cyrenæicus veterum & foetidam Assam officinarum non sunt succi diversi generis, & inter eos perparum interfit discriminis." Vid. *M. M.* ii. 606. ad 610. For my part I shall not pretend to determine the controversy. Neither can I say that the *ἀσα φηιδά*, or *ἀσα φηιδά* Myrepsi, is the *Asa foetida* off. especially since the learned *Fuchsius* makes it the scordium off. consentiente *Bodæo* in *Theoph.* p. 791. I mention him only because he is the oldest author in which I have found this name.

S E C T. II.

It is more acrid and diaphoretic than ammoniac; called cephalic, nervine, and uterine: and is commended internally in palsies, convulsions, lethargies, hysteric and hypochondriac disorders, female obstructions, and all cold, flatulent, and phlegmatic diseases; and externally for swellings, cramps, pains, &c.

"Calfacit 3. incidit, &c. *Ufus* internus præcipuus in suffocatione uteri, peripneumonia, ac vulneribus; alias raro adhibetur. Extrinsecus in tumidoliene, uteri suffocatione, panaritio (cum allio ovi albumine suscepto). Dosis. a ʒj. ad ʒʒ. N. 1. Solvitur super prunis coquendo in aqua, aceto, aut
" vino.

“vino. N. 2. Si quis epilepsiæ obnoxius fenserit suffitum ex Asa foetida ac cornu caprino paroxysmo actutum corripitur. *Præpar. pil. de Asa foetida, & pil. foetidæ.*” *Schrod.* 711.

i. It is very biting, hot, and bitter; and smells strong of garlic. “Odo-rem nobis virosum, allii fere, vehementiorem, magisque abominandum, late spirans, & nares acriter feriens; sapore primum amaro, postmodum mordaci; admota igni flavescent.” *J. B.* “Saporis est acris, mordacis, lenti, aliquantum nauseosi; odoris fragrantis gravis, allium mentientis.” *Herm. Cyn.* p. 636. Saporis acris & nauseosi; odoris gravis, allium redolentis.” *Dale* 114. “Saporis valde acris, nauseosi, viscosi, & alliacei, sicut & odoris foetidissimi, diu durantis.” *Nucl. Belg.* 128. “Odore viroso, ad allium accedente, sed vehementiore; sapore amaro, acri, mordace.” *Geoff.* ii. 606. — 2. It is just such a substance as *G. ammon.* consisting of resinous as well as gummy parts, easily softening, and dissolving the same way. “Analyti chymica ex Asæ foetidæ electæ lbij. prodierunt phlegmatis (sc. acidi ʒv. ʒij, tum acidi, tum urinosi ʒj. ʒvij. =) ʒvij. ʒij; olei ʒxij. ʒvij. gr. lx. Carbonis fuere ʒix. ʒij; unde cinerum ʒij. ʒivß. ac inde salis fixi salis gr. xij. (E. terræ ʒiibß. gr. xxiv.) & jactura fuit ʒiibß. gr. xij.” *Geoff.* ii. 619. But here is an ounce too much. — 3. The smell of it is commended in hysteric fits, though it is said by *Schroder* to bring on epileptic: and it is a common ingredient in hysteric plaisters. “It is of great service in epilepsies and convulsion fits of all kinds.” *Miller’s Bot.* 56. “Ammoniaco & galbano potentior est, & specifica in colica & hysterica passione; sudorifera est in variolis & morbillis, febribus malignis. Odor naribus exceptus hysterica passionem sistit. R. Asæ foetidæ ʒj, sal. succini gr. xv, boracis ʒß. F. cum elix. prop. pilulæ: quarum usus in mensibus, lochiis, & fœtu pel- lendis.” *Herm. Cyn.* p. 637. “Nervorum quoque affectionibus, sicut & paralyti medetur.” *Geoff.* ii. 621.

S E C T. III.

It is given to ʒj: but ʒß. is commonly enough. It is used in the tinctura fuliginis, troc. de myrrh. pil. foetidæ, pil. gummosæ, & empl. antihystericum. The tinctura foetida Ph. Lond. is a simple tincture of this gum, viz. Asæ foet. ʒiv. for sp. lbij.

“Præscribitur a gr. xii. ad ʒj. vel etiam ad ʒij usque (*vid. Ammon.*). In asthmate cum ovo forbili sumpta commendatur, et tanquam efficacissima prædicatur contra vim opii & cæterorum narcoticorum: externe admota, potenter emollit et resolvit, unde ad lienis tumores commendatur.” *Geoff.* ii. 621.

G. GALBANUM.

S E C T. I.

Galbanum. *offic.* Galbanum. *B. P.* 494. *J. B.* iii. 2, 52. *Perk.* 1544. *R. H.* 421. *Dale* 118. Galbanum—is a resinous gum, of a yellowish colour,

(though by age brownish) with intermixed whitish or greenish drops; of a warm, bitterish taste; and strong, and, to some, unpleasant smell. It is brought from Turkey, (generally very dirty) and supposed by some to be the juice of a ferula, called *ferula galbanifera*. *Lob. Ic.* 779. *T.* 321. *Ferulago*. *Dod.* 721. *Ger.* 1056. *Ferulago latiore folio*. *B. P.* 148. *Galbanifera Ferula*. *Lob. Obs.* 451. *J. B.* iii. 2, 52. *Ferula latiore folio*. *Park.* 875. *H. Ox.* iii. 309. t. 15. *Ferula foliolis pinnatifidis, pinnis linearibus, planis, trifidis*. *H. Cliff.* p. 95. the broader leaved Fennel-giant. "Oritur in hortis nostris hæc pervenuit a planta, semine copioso, lato, foliaceo, aromatico, reperto Anverpiæ in Galbani lachryma. Tota facie Ferulam refert, &c." *Lob. Obs.* 451. "Ferula galbanifera, *Lob.* Galbanum non profert, ut Cl. Tournefort observavit, sed aliud gummi genus intense rubens, nec vehementer olens." *Geoff.* ii. 632. But by others it is thought to come from the

Oreoselinum Africanum galbaniferum frutescens anisi folio. *T.* 319. *Ferula Africana galbanifera, ligustici foliis & facie*. *Par. Bat.* 163. *R. H.* iii. 252. *Anisum Africanum frutescens, folio & caule rore cœruleo tinctis*. *Pluk. Phyt.* 12. *Anisum, fruticosum Africanum galbaniferum*. *H. Ox.* iii. 297. *Oreoselinum anisoides arborescens, ligustici foliis & facie, flore luteo, Capitis bonæ spei*. *Breyn. prod.* ii. 79. The Gabanum plant. *Dale* 118. "Revera sponte vel vulnere fluit ex ferulacea seu umbellifera quadam planta quæ dicitur Oreoselinum Afric. Galbaniferum, frutescens, anisi folio. *T.* . . In diversis Africæ regionibus, Mauritania præsertim, nascitur, & in Persia." *Geoff.* ii. 631. But I do not think this sufficiently certain as yet. "Genuina illa planta quæ Galbanum off. fundit, nostri seculi botanicis nondum innotuit. Ferulaceam esse veteres docent omnes, quænam vero species sit, non constat. . . Si Lobeliana planta sit *Ferulago latiore folio*. *B. P.* certum est eam succum Galbano similem, haudquaquam fundere, licet odor ejus Galbano valde similis deprehendatur. Incertum autem est, an *Ferula* quam nunc exhibemus, legitima illa sit è qua Galbanum off. emanat, ut ex candicis geniculis aliquando lacrymam collegerimus Galbano simillimam. . . Plures enim extare possunt stirpes quæ succum Galbano similem stillant, ut de variis lachrymis quæ inter se conveniunt, & e diversis stirpibus leguntur, nobis compertum est." Thus *Herm. Par. Bat.* 163. candidly: and in fact we find another plant yet, which is said to yield Galbanum, viz.

"*Ferula Africana Galbanifera frutescens, myrrhidis folio*. *H. Amstel.* ii. p. 115. Another Galbanum-plant." *Dale* 118. *Ferula Africana galbanifera, folio myrrhidis*. *H. A.* ii. 115. *B. J.* 65. in which index all the forenamed three plants are marked as officinales. The Galbanum however of the ancients and of the shops seems to be the same.

"Galbanum (*χαλκάνη*) liquor (*ῥπος*) est nascentis in Syria Ferulæ; id nonnulli *μεπωπιον* vocant. Probatissimum est quod thuris præbet effigiem, grumulosum purum, pingue, minime lignosum, at nonnihil retinens admixti seminis, ac ipsius quoque Ferulæ; odore gravi, neque valde humidum, neque etiam penitus aridum. Admixtus resina, faba fresa, & ammoniaco adulteratur." *Diosc.* l. 3. c. 97.

"That which comes from Turkey is the best; the East-India sort is darker coloured, dryer, and fuller of dross and stalks." *Miller's Bot.* 207. "It comes from Smyrna and Aleppo." *Savary's Diæt.* iii. 499.

S E C T. II.

It has all the virtues of ammoniac, but is rather more stimulating; and is used the same way, but wants straining more. It is an ingredient in the mithridatum, theriaca, pil. gummosæ, trochisci de myrrha, empl. anodynum, empl. antihystericum, empl. diachylon cum gummi, empl. Oxycroceum, & cataplasma suppurans: and a chemical oil has been ordered to be drawn from it. The dose in substance is ad ʒj.

“Calfacit, siccatur 2. complete, emollit, resolvit, extrahit. *Usus præcip.* in-
 “trinfecus in mensibus ac partu pellendis, in tussi inveterata ac asthma; ad-
 “versatur toxicis. Extrinfecus prodest in partu ac mensibus, suffocatione uteri,
 “vertigine, in furunculis, ac lentiginibus: quin & glandi impositum emplastri
 “vice urinam provocare dicitur. *Præpar.* 1. Galbanum depuratum. Solvi-
 “tur in quolibet liquore aqueo, aceto, succo, vino: exprimitur & inspissatur.
 “2. Oleum stillat. *Com. & Sam. Cleff.* 3. Galbanetum balsamum, seu sp.
 “terebinthinæ galbanetus. 4. Ceratum de galbano, seu matricale.” *Schrod.*
 p. 722.

1. It is somewhat acrid and bitter, and smells strongly, and generally dis-
 agreeably; and though less nauseous and not so cathartic as the ammoniac,
 yet it seems more briskly to stimulate the nerves; and hence it is in all the
 great antidotes, as they are called, as alexipharmic and diaphoretic. “Sapore
 “est amaricante cum acrimonia; odore vehementi, & cum gravitate quadam
 “viroso.” *J. B.* “Saporis subacris, subamari, nauseosi, odoris fragrantis,
 “gravis; odor & sapor idem qui ammoniaci, mitior tamen, tantumque gradu
 “differunt. Virtute nonnihil inferior est ammoniaco, sed in specie valet in
 “colica hystERICA & affectibus convulsivis. Datur ut ammoniacum.” *Herm.*
Cyn. p. 633. “Sapore amaricante cum acrimonia, odore gravi.” *Dale* 118.
 “Sapore amaricante acri, odore vehementi, cum gravitate quadam virosâ.”
Geoff. ii. 631; “of a strong, piercing, and to most an unpleasant smell; of a
 “bitterish warm taste.” *Mill. Bot.* 207. — 2. It is a resinous gum, of much
 the same consistence with ammoniac, and probably the juice of a species of the
 same genus. And—3. The same virtues are generally attributed to both.
 For Galbanum is commended in coughs, asthmas, colics, female obstructions,
 hard labour, hysteric fits, &c. vid. *Geoff.* ii. 633. “Est inflammabile, totum
 “tamen non deflagrans; saporis acrioris, & penetrantioris quam ammoniac-
 “cum; odoris foetidi & gravis: expurgat viscida, est bechicum & aperiens
 “fere instar ammoniaci, dicitur etiam diaphoreticum, diureticum, anthelmin-
 “thicum et carminativum; est tam validum emmenagogum ut foetum mor-
 “tuum expellat: valet ad morbos convulsivos, tussim, asthma, colicam hyste-
 “ricam, et hypochondriacam passionem, etiam abdomini applicatum: ejus
 “odor epilepticos & hystericas excitat. Externe emollit, resolvit, digerit,
 “detergit, et ad suppurationem perducit, fere ut ammoniacum: vim habet
 “magis nervinam et anodynâ; valet ad dolores artuum, præcipue rheuma-
 “tismum et arthritidem, ad contracturas et paralysem. Datur in substantia
 “ad ʒss.” *Nucl. Belg.* p. 131. “Qui diluto manus unxerit, impune tractabit
 “serpentes; si veteribus fides.” *R. H.* 421.

“Disce & odoratam stabulis accendere cedrum,

“Galbanecque agitare graves nidore chelydros. *Virg. Georg.* l. 3. v. 414.
 “Analyfi

“Analyſi chymica ex Galbani electi lbij prodierunt phlegmatis, &c. ʒvij.
 “ ʒvj. gr. lxx; olei ʒxivʒ. gr. xxx. Carbonis fuerunt ʒvij. ʒiʒ; unde cin-
 “ erum ʒv. gr. xlvij. ac inde ſalis fixi non merè alcalini gr. xij. (E. terræ ʒv.
 “ gr. xxxv.) & jaſtura fuit ʒiʒ.” *Geoff.* ii. 632. “Oleum per iteratas
 “ diſtillationes purgatum color cœruleo elegantiffimo tinctum apparuit. Gal-
 “ banum conſtat ſale tartareo & oleo craſſo ſœtido.” *Ibidem.* “Præparatur
 “ Galbanum ut gum. ammoniacum.” *Pb. Edinb.*

G. O P O P A N A X.

S E C T. I.

Opopanax. offic. *Opopanax.* *B. P.* 494. *J. B.* iii. 2, 155. *Park.* 1544.
R. H. 410. *Opopanax.*—This is a refinous gum, of a browniſh or reddiſh-
 yellow colour on the outſide, ſomewhat paler within, and ſometimes varie-
 gated; of a warm bitteriſh taſte, and fragrant ſmell; brought from Turkey in
 irregular lumps, ſeldom in round drops or tears. It is the proper juice of the

Panax Herculeum. offic. *Dale* 115. *Pastinaca ſylveſtris altiffima.* *T.* 319.
Panax, Paſtinacæ folio (an *Syriacum Theophraſti?*) *B. P.* 156. *Panax coſti-*
num. *B. P.* 156. *Sphondylion, vel potius Paſtinacæ Germanicæ affinis Panax,*
ſive Pſeudocoſtus, flore luteo. *J. B.* iii. 2, 156. *Panaces peregrinum.* *Dod.*
309. *Panax Heracleum majus.* *Ger.* 1003. *P. Heracleum alterum, ſive*
peregrinum Dodonæi. *Park.* 948. *P. Herculeum majus.* *Ger. R. H.* 410.
P. Heracleum. *Ger. H. Ox.* iii. 315. *Pastinaca foliis decompoſito-pinnatis.*
H. Cliff. 105. *Hercules's All-heal.*

It grows in Provence, Italy, Sicily, &c. “Ex hujus vulnerato præſertim
 “ circa radicem, caule, ſuccus æſtivis menſibus manat, ſponte concreſcens,
 “ *Opopanaci colore ſimilis; odoris quidem exigui, ſed guſtu exalfaciens.*
 “ Non modo aut in Italiæ, aut aliarum calidarum regionum hortis, ubi quan-
 “ doque ſeritur, ſuccus e vulnerato caule exit; verum & in Belgio obſervatum
 “ eſt, æſtate fervida hujuscemodi quoque lachrymam incifo ſcapo effluxiſſe.
 “ Atque hic quidem ſuccus Panaces genus hanc ſtirpem eſſe evidenter oſtendit:
 “ quod & ſemen confirmat in Panacis lachryma repertum, ex quo Petro Cau-
 “ denbergio, Pharmacopœo Antuerpienſi hæc primum in Belgio enata ſtirps
 “ eſt.” *Dod.* 309. “Idem confirmat Paulus Boccone, his verbis, e caule
 “ hujus plantæ incifo extillat gummi . . . quod genuinum antiquorum Opo-
 “ panax cenſendum eſt, &c.” *R. H.* 411. With regard to theſe plants grow-
 ing here, I venture to ſay, that, if their juice be not the *Opopanax*, it is very
 like it. “Adfertur ex Oriente; ſed ignoramus plane ex qua planta exſudet.
 “ Græcis notus fuit. Ex Panace Heracleo dicto extrahitur inquit Galenus,
 “ radicibus & caulibus ipſius incifiſis. Quinam vero ſit ille *Panax Heracleus*
 “ incertum eſt apud authores.” *Geoff.* 642. “Plerique conſentiunt in Pana-
 “ ces Herculeum, id, inquam quod primum eſt in ordine apud Bauhinum.
 “ Hoc in ſtatione ſua firmant. 1. Quod non in Italia tantum, ſed & Germa-
 “ nia . . . ſuccum fundit *Opopanaci* quadantenus ſimilem, colore, odore, ſa-
 “ pore. Quin ipſa planta digitis trita, manifeſte prodit *Opopanacem* uſualem.
 “ 2. Quod in *Opopanacis* grumis reperta ſemina, in Belgio ſata, hanc plan-
 “ tam

" tam produxerint. Quem officinæ ostentant, videtur legitimus Diosc. esse." *Hoffman*, p. 46. Vid. *Dioscor.* l. 3. c. 55. p. 196.

" Opopanax comes to Marseilles from the East-Indies, by Aleppo, Smyrna, and Holland, from three to four quintals annually." *Savary's Dict.* iii. 535.

" This is a gum which is brought from Turkey." *Miller's Bot.* p. 321.

" Affertur ex Oriente." *Geoff.* l. c.

S E C T. II.

It is emollient, attenuant, diaphoretic, and carminative; called purgative, cephalic, pectoral; and commended inwardly in all cold, phlegmatic and flatulent diseases, especially of the uterus and urinary passages; and outwardly as discutient for scrophulous and other hard tumors. It agrees in virtues with levisticum, more than with galbanum.

" Calfacit tertio, siccat 2. emollit, digerit, flatus discutit, purgat pituitam crassam & lentam a partibus remotis, cerebro, nervis, sensoriis, juncturis, thorace; uvulæ delapsæ opitulatur (suffitu in os immisso). *Præp.* Opopanax depuratus." *Schrod.* p. 734. " Mundificat cerebrum, nervos, pectus; tussi antiquæ confert: potum cum aceto hora una ante accessionem febrilem, arcet rigorem, maxime si idem, cum succo apii ac oleo anethino, spinæ illi-natur. Dosis a ʒʒ ad ʒj. Corrigitur spica & mastiche. *Præp.* 1. Opop. depuratus: fit cum aceto. 2. Extractum. 3. Pilulæ. 4. Oleum stillati-tium." *Schrod.* p. 784.

1. It is neither very hot nor very bitter, but disagreeable, tasting much like lovage. " Sapore est amaro, tenui, ligustico vehementiore; odore gravi." *C. B. in Matth.* p. 546. " Sapore acri & aliquantum amaro, eo fere qui in ligustico nostro observatur." *J. B.* iii. 2, 155. And really the proper juice of levisticum does not a little resemble Opopanax. " Saporis est acris, amaricantis, ingrati, aliquatenus nauseosi; odoris fragrantis, gravis." *Herm. Cyn.* p. 702. " Saporis acris, amari ingrati, odoris gravis." *Nucl. Belg.* 133. " It is of a very strong not unpleasant smell, and of a warm bitterish taste." *Miller*, p. 322. " Sapore amaro, odore gravi." *Geoff.* ii. 642. Hence though this be a substance like the former, yet they differ considerably. — 2. It is a very weak purgative, if it be at all so. " Vis purgatoria Græcis incognita fuit. Purgat apud *Mesue*, pituitam crassam & lentam a remotis partibus, ut aiunt. Apud nostros homines vix datur hoc sine: utuntur autem pro deductorio aliorum purgantium, ut Fallopius nos docet. . . Mesue propinat a ʒj ad ʒij." But it is a more efficacious discutient. " Commendatur in omnis generis duritiis, strumis, gangliis, nodis, scirrhis viscerum, & extrinsecus emplastri modo impositum. Laudatur in omnis generis frigidis affectibus, tam interioribus, quam exterioribus. Præter hæc menses & urinas potenter movet." *C. Hoffman*, p. 47. " Alvum citra molestiam purgat." *Geoff.* l. c.

" Analyti chymica, ex Opopanacis purissimi lbij prodierunt humorum ʒxj; olei ʒv. ʒij. gr. vj. Carbo pendebat ʒxj. ʒj; unde cinerum ʒj. ʒiiij, ac inde salis alcali fixi ʒij. gr. xlij. (E. terræ ʒj. gr. lxxvj.) & jactura tuit ʒiv. ʒij. gr. lxxvj." *Geoff.* ii. 642: who adds, " Constat ex tartaro, sale ammoniacali, & oleo arête conjunctis." Here is much water and but little oil.

S E C T. III.

It is given to ʒj. and is used in our mithridatium, theriaca; and is sometimes prepared like G. ammoniac: but otherwise it is little used, being left out of the troch. de myrrha; though retained in the pulvis e myrrha comp. *Pb. Lond.* which is a better medicine; and also in the pilulæ gummosæ.

The dose is commonly made a ʒiʒ ad ʒj. but there is no danger in ʒij, to which quantity Mesue ordered it.

G. S A G A P E N U M.

S E C T. I.

Sagapenum. *offic.* Sagapenum. *B. P.* 494. *J. B.* iii. 2, 156. *R. H.* 1843: *Ger.* 1056. *Park.* 1544. Sagapenum, Sacoponium *offic.* *Schrod.* 740. Gum Sagapenum.—This is a resinous gum, brought to us in lumps or masses, composed of drops clotted together with other substances, of a brownish colour without, greenish within; of a hot, biting, bitterish taste; and strong smell, somewhat resembling that of leeks.

According to Dioscorides Sagapenum is the juice of a ferulaceous plant, growing in Media; Galbanum of a Syrian, and Ammoniac of a Libyan ferula. *Vid. Dioscor.* l. 3. c. 95, 97, and 98. And we know yet little more of these plants than what we learn from thence. “Planta ex qua stillat ignota est. “Ferulæ speciem esse conjiciunt ex caulis partibus & seminibus cum hoc succo: “sæpius intermistis.” *Geoff.* ii. 644. *Dale* makes it the

Ferula fœmina *Plinii.* *B. P.* 148. *T.* 321. Ferula folio Fœniculi; semine latiore & rotundiore. *J. B.* iii. 2, 43. *R. H.* 420. Ferula. *Dod.* 321. *Lob. Obs.* 450. *Ger.* 1056. Ferula tenuiore folio. *Park.* 875. Ferula major seu fœmina. *M. U.* 35. Ferula tenuiore folio seu fœmina *Plinii.* *H. Ox.* iii. 309. Ferula foliolis linearibus, longissimis, simplicibus. *H. Cliff.* 95. Ferula. *offic.* Fennel-giant. *Dale* 118. But on what authority he does this I know not.

“Sagapenum (σαγαπηνου) ferulacæ herbæ liquor est, in Media nascentis. “Præfertur translucent, foris fulvo, intus vero albo colore, medio inter fil- “phium & galbanum odore, acrius gustu.” *Diosc.* l. 3. c. 95.

“It comes from Alexandria.” *Schrod.* *Dale, Miller.* “From Persia, by “Smyrna and Aleppo.” *Sav. Dist.* iii. 503. “Hodie ex Persia & Oriente “nobis adhuc affertur.” *Geoff.* ii. 644.

S E C T. II.

It is milder than assa fœtida, and more acrid than galbanum, partaking of the virtues of both, yea and of all the ferid gums; called cephalic, nervine, pectoral, uterine; and commended inwardly in all cold, flatulent, and phlegmatic distempers; and outwardly for pains, tumors, &c.

“Calfacit

"Calfacit 3. siccatur 2. attenuat, aperit, substantiæ est tenuis: tanta extrahendi vi pollere dicitur, ut quoque spicula ex carne eliciat. Purgat lentos & crassos, imo & serosos humores ex ventriculo, intestinis, utero, renibus, cerebro, nervis, juncturis, pectore. Hinc prodest in hydropse, tussi inveterata, asthma, cephalalgia, spasmo, epilepsia, paralyti, tremore artuum, in obstructione & tumore lienis, febribus intermittentibus, dolore colico; menses ciet, (sed foetum enecat;) urinam movet. Extrinsecus convenit in pleurisi aliisque tumoribus ac doloribus, mitigatione ac resolutione opus habentibus. Fumus excitat epilepticos, hordeola ciliarum sanat. Dosis a ʒss ad ʒj. *Præp.* 1. Sagapenum depuratum. 2. Pil. de Sagapeno. 3. Pil. de Sag. Camilli. 4. Pil. foetidæ. 5. Oleum stillatitium." *Schrod.* 740.

1. It is an acrid and strongly odorous resinous gum. "Mordaci acrisque sapore, odore viroso." *J. B.* "Saporis acris, mordacis, nauseosi; odoris virosi si recens, fragrantis gravis." *Herm. Cyn.* 639. "Gustu acris, odore gravi, porrumque æmulante." *Dale* 118. "Odoris est alliacei, gravis; non tamen ita foetidi ut asa foetida; saporis acris penetrantis." *Nucl. Belg.* 134. "Mordaci & acris sapore, odore viroso, gravi, ad porri & pinus saporem accedente, & quasi medio inter assam foetidam & galbanum." *Geoff.* ii. 643. —2. The Arabians make it purgative also. *Vid. Mesue*, p. 69. "Sagapenum purges pretty strongly, when given to ʒss." *Chom. H. pl. us.* p. 190: and there is no doubt but any of these gums in that quantity will either purge or vomit. I think ammoniac would prove the strongest, and opopanax the weakest cathartic among them. "Purgatoria (vis) non (videtur a manifestis qualitatibus pendere) plane, sed ita ut valde ab iis promoveatur. Hinc inter validiora est. Mesue ait nocere ventriculo & hepati, &c." *Hoffm.* p. 64. "Ea facultas a Græcis silentio prætermissa. Reipsa purgandi virtute donatur, sed debili & ignava, & stimulo eget. Potentissime aperit, &c." *Geoff.* ii. 644.

"Analyti chymica ex Sagapeni puriss. lbij prodierunt humorum ʒx. ʒvj. gr. liv; olei ʒviiiß. gr. xxiv. Carbonis fuerunt ʒviiij. gr. lxxvj; unde cinerum ʒj. ʒiiiiß; ac inde salis fixi salis ʒj. gr. ix. (E. terræ ʒx. gr. xxvij.) & jactura fuit ʒviiij. ʒvj. gr. xlii." *Geoff.* ii. 644. But here the sum total is lbij. ʒiv. gr. xlii.

S E C T. III.

It is given to ʒj. but ʒij. is a large dose. It is an ingredient in the mithridatium, theriaca, & pil. gummosæ. It is strained like ammoniac.

"Mesue dat a ʒss. ad ʒj, ut Sylvius habet; aur. 1. ut antiqua versio." *Hoffman*, p. 64. "Dosis Sagapeni ʒss. ʒij. ʒj." *Ph. Bat.* "Intus sumitur a ʒj. ad ʒj." *Geoff.* ii. 645. Usus obtinuit at nunquam solum usurpetur, sed semper cum aliis medicamentis mistum, et sæpius in pilulari forma, ob ingratum saporem." *Ibidem*.

If you compare the analyses of these five gums, as *Mr. Geoffroy* delivers them, you will find that lbij. of each yielded very different proportions of principles, as follows:

Humorum

	Humor.	Oleorum	Carbonis	Jacturæ	Salis fixi	Terræ.
	3 3 gr.	3 3 gr.	3 3 gr.	3 3 gr.	3 3 gr.	3 3 gr.
Ammon.	7 7 34	9 7 48	8 7 00	5 2 00	0 0 61	0 7 23
Asæ fœt.	7 2 00	13 7 60	9 2 00	2 4 12	0 0 12	2 0 24
Galbani.	7 6 70	14 4 30	7 1 36	2 4 00	0 0 13	0 5 35
Opopan.	11 0 00	5 3 06	11 1 00	4 3 66	0 0 42	1 0 66
Sagap.	10 6 54	8 4 24	8 0 66	8 6 42	0 1 09	1 2 27

Hence we see that we have either little reason to depend on the accuracy of these analyses, or on any chymical analysis, for the confirmation or discovery of the virtues of simples.

L A C C A.

S E C T. I.

Lacca, offic. *Lacca officinarum.* *B. P.* 499. *Garziæ. Clus. Exot.* 158. *Acostæ. Ibid.* 258. *J. B.* i. 2, 44. *R. H.* 1535. Gum Lacca.—This is a hard, brittle, semipellucid resinous substance, of a reddish-brown colour, of little taste or smell, but very fragrant and sweet-scented while it is burning: brought from the East-Indies, adhering to and surrounding little short sticks like a thick crust, called *Lacca in ramulis*, or Stick Lac; which is its natural state. Of this is made the *Lacca in granis*, or Seed Lac; and *Lacca in massis vel massulis*, Shell Lac.

“ There are three kinds of Gum Lac, viz. Seed Lac, which is in small, bright, reddish grains: of this melted is made the Shell Lac, which is in flat thin transparent pieces, of a reddish-brown colour, and is the best sort: the Stick Lac is what comes upon short sticks, which are covered over by it; and this is as it is in its native state.” *Miller’s Bot.* p. 248. But in the *Mem. Acad.* 1714. six sorts of Lac are described.

Lac is commonly called a vegetable gummi resina; but more probably it is an animal production, though perhaps the greatest part of it may be originally vegetable, and only collected by insects, as wax is by bees. However, Amatus Lusitanus, I think, is the first who made Lacca an animal substance, or such a substance as wax is, and not the gum of a tree; which Garcias, Bon-tius, and more lately father Tachard confirmed: and Mr. Geoffroy’s observations seem to have put it out of doubt. “ Amatus scribit, in errore versari eos qui cancamum laccam esse putant: laccam enim non esse gummi aut plantæ alicujus guttam, ut hucusque omnes fere crediderint; sed potius formicarum alatarum stercus, fabagove, velut cera apum.” *J. B.* i. 2, 45. “ In vastæ arboris furculis, & minutioribus ramis, magnæ formicæ, in terræ visceribus aliisque locis enatæ, hanc Laccam elaborant (ut apes mel conficiunt) materiam ex ipsa arbore exsugentes. . . . Formicas autem hanc Laccam elaborare, inde manifestum est, quod plerumque alæ formicarum Laccæ permixtæ conspiciuntur.” *Garcias*, l. c. “ Unicum hoc addo, quod formicæ istæ alatæ sunt, ac coloris punicei, ac super flores, frutices, arbores, ac

“herbas circumvolitant, ex quibus, non secus ac apes, Laccæ conficiendæ
 “materiam colligunt, ac in communes operas conferunt; non alatæ autem
 “formicæ eam non elaborant.” *Bontius in Garc. c. 8. fol. 4. a.*

“*F. Tachard*, Jesuit, was missionary in the East-Indies, an. 1709. Accord-
 “ing to him, little red ants deposit on the branches of several trees a red
 “moisture, which hardens in five or six days, and is very different from the
 “gum or tear issuing from those trees when wounded. These ants feed on
 “flowers, and may be looked on as the bees, the lac being the honey. They
 “work eight months in the year, and rest during the rains.” *Hist. Acad. 1710.*
 See also *Mr. Geoffroy's Obs. on the Lacca, Mem. Acad. 1714.* where the stick
 Lac is particularly described; and appears to be a kind of hive, consisting
 of many and pretty uniform cells; containing small red friable bodies, of as
 fine a colour as cochineal when powdered, for the most part hollow, but some-
 times full of mouldiness, and sometimes of a powder; amongst which micro-
 scopes discover a great many long, slender, many-footed, transparent insects.
 These small red bodies swell in water and tincture it, and stink in the fire like
 animal substances. Are they the involucra or embryos of insects? Thus
Mr. Geoffroy. It is not in his *M. M.*

Some have taken Lacca to be the *cancamum* Dioscoridis, l. 1. c. 23. But
 it seems to have been unknown to the ancient Greeks, and the latter Greeks
 to have got it from the Arabians. *Myrepsus* has an *antidotus dialacca*, wherein
 it is called *λακκα, των βαφρων*, Lacca insectorum. *Antidot. c. 123. col. 387.*
Vid. Bod. in Theoph. p. 835.

S E C T. II.

The gummi-resinous part seems to agree with wax, as the tincturing or ani-
 mal part in it does with cochineal, in virtues. It is called diaphoretic and
 diuretic; and commended in the asthma, dropsy, jaundice, &c. though with
 little reason. It is expelled the *London M. M.* and is used *here* only in the
tinctura Laccæ, for scorbutic gums, and the like.

“*Calfacit* (aliis temperate, 2.) attenuat, aperit, sanguinem purificat, su-
 “corem ciēt, diuretica est. *Ufus præcip.* in obstructionibus lienis, vesicæ,
 “fellis, epatis, ac pulmonum; & hinc in hydrope, ictero, asthmate, aposte-
 “mate pulmonum; in expellendis variolis, morbillis, atque pestilentiali con-
 “tagio, in ciendis mensibus, &c. *Præp. 1.* Lacca lota, seu præparata.
 2. *Trochisci de Lacca.*” *Schrod. 723.*

1. It discovers no acrimony to our senses; and appears to be more difficult-
 ly dissolved than wax itself: “*Sapore nullo evidente.*” *J. B.* “*Prunis im-*
 “*posita bullat primum, levem odorem resinolum spirans, tandemque flam-*
 “*mescit.*” *J. B.* “*Saporis est resinosi, odoris dum accenditur fragrantis*
 “*sulphurei, nonnihil acidi, & spiritibus nostris mire grati.*” *Herm. Cyn. p. 647.*
 “*Sapore resinoso, odore dum accenditur grato.*” *Dale 306.* “*Saporis est*
 “*resinosi, accentum reddit odorem gratum & fragrantem.*” *Nucl. Belg. 133.*
 (2) Lac does not dissolve nor liquify in oil olive, nor even tincture it though
 heated over the fire: hence it is evidently not a rosin purely. But it gives a
 yellowish red tincture to sp. terebinthinæ, a part remaining indissolvable. (β) Sp.

vini

vini draws a pale red tincture from it, which water soon turns milky, precipitating a grayish-white rosin. (γ) It communicates a purple colour to ol. tartari, whence by an acid a brown rosin may be precipitated. Hence sp. vini and the alkali dissolve only the more resinous part. (δ) Spir. vitrioli and Spirit of nitre turn Lacca into a pale yellow, but are not tintured by it; yet, boiled in water with an acid, it makes a fine red. Vid. *Lem. Diſt.* p. 288. How much of the shell Lac will sp. vini dissolve? — 2. It yields much the same principles with cera apum; though it does not, like wax, melt in oil. “By a chemical analysis, Lacca yields an acid spirit and a butter like wax, as Lemery observes, if freed from the animal parts; for otherwise it gives also a volatile spirit mixed with the acid.” *Mem. Acad.* 1714. l. c. — 3. It is the animal part which affords the fine colour; and this is easily extracted with water; to which the diaphoretic virtues, if any such it has, belong. The gummy or waxy part I reckon indissoluble by the vis vitæ; and therefore useless internally.

“Utimur ejus tinctura ad gingivas laxas, cruentas, erosas & putridas.” *Nucl. Belg.* 133. And Fuller, *Pb. Extemp.* has a tincture made ex Laccæ ʒß, & allum ulsi ʒj digested in a weak sp. cochleariæ, with the same intention. “Ad gingivas scorbuto corruptas singulare est.” *Our disp.* has a more compound one. But if they owe any thing but the colour to the Lacca, it is more than I know; and the supposing it seems owing to a mistake, viz. that Lacca is the Cancanum; of which, among other things, Dioscorides (l. i. c. 23.) says, “Quin & adversus gingivas humore prægnantes, & ad dentium dolores, est liquid aliud efficax.”

M Y R R H A.

S E C T. I.

Myrrha, offic. Myrrha $\sigma\mu\upsilon\pi\upsilon\alpha$ Dioscoridi, Theophrasto, Galeno. *B.P.* 501. Myrrha. *Matth.* p. 87. *J. B.* i. 2, 311. *Park.* 1593. *R. H.* 1841. *Garcia Clus. Exot.* 157. Myrrha, offic. $\Sigma\mu\upsilon\pi\upsilon\alpha$, Dioscor. $\mu\upsilon\pi\pi\alpha$, Hippocratis. *Geoff.* ii. 637. Myrrh—is a resinous gum in lumps or drops of different sizes, of a brown or reddish yellow colour, somewhat pellucid, and not hard to powder; of an oily aromatic bitter taste, and pretty fragrant smell. It softens in the mouth and sticks to the teeth; and when recent is fattish. “Powdered it is of a bright yellow colour.” *Miller's Bot.*

The myrrh tree is said to grow in Arabia and Ethiopia; but we know no more about it. The gum comes either by the way of the East-Indies, or from the Levant. “Plurima adfertur ex Arabia ad nos Myrrha, quæ Indis Bela dicitur, tum etiam ex Æthiopia. Qualis vero sit arbor quæ eam profert, aut qua ratione resina eliciatur, nunquam scire potui.” *Garc.* l. c. “Myrrh is imported to Marseilles, from the Levant, in large *bales de cuir*, of four or five hundred pounds weight.” *Sav. Diſt.* ii. 843. “It comes from Arabia Felix, by Egypt, Holland, and England, from 100 to 150 quintals annually.” *Savary's Diſt.* iii. 527. “It is brought from the East Indies.” *Mill. Bot.* 305. “Defertur Myrrha ex ea Æthiopiæ parte, quæ regio Troglodytarum olim dicebatur.” *Geoff.* ii. 637.

Myrrha, Græce *μυρρα* (which we find oftener than in *Hippocrates*) Aëolice dicitur *μυρρα*, from *μυρον* unguentum. Though, according to the poets, it has its name from *Myrrha*, the daughter of *Cynara king of Cyprus*, who was metamorphosed into this tree, for being criminally in love with her father. Vide *Ovid's Metamorph.* l. 10. v. 298—502; who ends thus:

“ Quæ quanquam amisit veteres cum corpore sensus,
 “ Flet tamen; & tepidæ manant ex arbore guttæ.
 “ Est honor & lachrymis: stillataque cortice Myrrha
 “ Nomen herile tenet, nullique tacebitur ævo.”

If you want to know what the ancients thought of Myrrh, see *Theoph. Hist.* l. 9. c. 4. *Dioscor.* l. 1. c. 77. *C. Hoffman*, l. 2. c. 154. *J. B.* &c.

S E C T. II.

It is attenuant, antiseptic, diaphoretic, anodyne, and cordial; called nervine, stomachic, uterine, alexipharmic, febrifuge, and anthelmintic; and commended internally in female obstructions, difficult labour, hysteric disorders, jaundice, intermitting and malignant fevers, worms, and in all cold phlegmatic and flatulent diseases, (*ubi languet natura*;) and externally for wounds, ulcers, carious bones, gangrenes, &c.

“ Myrrha calfacit & siccat 2. (aliis 3.) aperit, subastringit, attenuat, maturat, discutit, putredini resistit. *Ufus præcip.* in uteri obstrukcione, foetu expellendo, in pulmonum & intestinorum mucilagine, ac inde nata raucedine, tussi, & angina, pleuritide, colica, lumbricis; compescit diarrhœam ac dysenteriam; febrium rigorem, præcipuè quartanæ, arcet. Extrinsecus prodest in igne sacro, gangræna, tumoribus, vulneribus inveteratis & recentibus, imprimis capitis, unde in emplastris sticticis, ut vocant, usus ejus creberrimus esse solet. Masticata ac subinde deglutita, halitus foetorem emendat, coryzamque curat, &c. Dosis a ℥β ad ℥ij. vel ʒj. *Præp.* 1. Myrrha depurata. 2. Myrrhæ extractum, sp. vini. 3. Oleum myrrhæ. 4. Liquor Myrrhæ. 5. Trochisci de myrrha.” *Schrod.* p. 727.

1. It is a warm, aromatic, and pretty bitter resinous gum; “sapore amaro, subacri; odore nares ferit acriter, ubi adoletur; nam flammam concipit; nec aquæ immersa dissolvitur ut gummi, sed diutius in ea relicta limi instar diffuit & flavescit.” *J. B.* “Saporis subacris, amari, & aromatici; odoris fragrantis. Myrrha stacte est quæ sua sponte effluit.” *Herm. Cyn.* 677. De stacte. vid. *Hoffm.* l. c. N°. 8, 9, 10. “Saporis est amari, acris; odoris fragrantis.” *Nucl. Belg.* 202. “Sapore amaro, subacri, aromatico, nauseoso tamen; odore gravi, nares feriente, dum conteritur, nec insuavi suffitu, dum comburitur.” *Geoff.* ii. 637. — 2. It flames in the fire, does not dissolve intirely in spirits or oils or water. *N.* Water dissolves about two thirds of it; sp. vini rect. not so much. *Qu.* Is the gummous or resinous the most active part; or is its bitterness lodged in the gum or rosin? Probably equally in both; which can be extracted with common proof spirits, which consequently are the best menstruum. Such a solution is both very bitter and odoriferous. “Myrrha non perfecte oleaginosus dissolvitur, sed partim grumescit; nec etiam

“ aqueis facile & expedite diluitur, sed in aqua relicta major pars non dissoluta
 “ limi instar dissuit. Sp. vin. rectificatus diuturniore digestionē extrahit tinc-
 “ turam, seu partem resinofam, gummosa tantum remanente portione, odoris
 “ & amaroris prorsus experte, quæ aquâ dissolvitur, aut saltem mollescit &
 “ in mucum lentum ac viscidum convertitur. Tota dissolvitur spiritu vini
 “ tartarifato, aut consociato cum sp. urinoso salis ammoniaci.” *Geoff.* ii. 638.
 “ The committee are surpris’d that authors of great name should so un-
 “ accountably assert Myrrh to be indissolvable either in water or spirit of wine,
 “ without the assistance of much art: whereas, on the contrary, boiled in
 “ water it dissolves freely, and, while the water is boiling hot, keeps almost
 “ intirely suspended; but, when the water is cold, about one third only, or
 “ less, subsides, much the greater part remaining united with the cold water.
 “ This water, evaporated, leaves a gum dissolvable again in water, but will
 “ not give so much as a tincture to spirit: spirit will take up a great part
 “ of what precipitates from the decoction, the rest seeming to be dregs.
 “ Nor has the committee found that macerating the Myrrh with salt of tartar
 “ will enable spirit to dissolve more of the Myrrh than the resinous part now
 “ mentioned; and the same quantity may be extracted by spirit from the
 “ whole Myrrh without any such preparation.” *Pemb. Disp. Narrative*, p. 86.
 Vid also *Boerh. Chem.* ii. *procef.* 57. p. 231. and *Lewis’s Pharm.* p. 134. Is
 none of the essential oil lost in boiling Myrrh in water? How much Myrrhæ
 dissolves in alcohol vini? And how much in common brandy? Vid. *N. Disp.*
 p. 164. — 3. It is much used both outwardly and inwardly, and with great
 success in promoting the fluxus mensium, & hæmorrhoidum, and consequent-
 ly hurtful in pregnancy, and to such as are subject to hæmorrhages, or are
 of a sanguine and plethoric constitution. I cannot therefore commend it in
 the pleurisy, small pox, measles, internal ulcers, dysenteries, and the like, as
 many do, (vid. *Schrod. Geoff.* &c.) thinking it seldom safe in such cases.
 “ Vim habet calfaciendi, (fluxiones sistendi is wanting often) soporem in-
 “ ducendi, (καρωτικὴν) &c. *Dioscorid.* l. i. c. 77. p. 42. And *Galen* says,
 “ Papaverus succus, et Myrrha, et styrax, et crocus, si largius bibantur,
 “ quædam dementant, quædam mortem inferunt.” *Simpl.* l. 5. c. 19. p. 37.
 C. (where is an account of a lady killed by opium, which is very well worth
 observing). Though I will not call Myrrh narcotic like opium, yet I think
 it partakes much of the nature of saffron, and that it may be said to rarify the
 blood no less than crocus, and to be anodyne, as Galen observes elsewhere.
 (Vid. *Hoffm.* p. 364. § 31.) and that it sometimes occasions the head-ach.

“ Analyfi chymica, ex Myrrhæ electæ lbij. prodierunt humorum ℥x,
 “ gr. xxxiv: oleorum ℥. 5v. gr. lxviii. Carbonis fuerunt ℥ix. 5vj. gr. liv;
 “ unde cinerum ℥ij. 5iiiß, ac inde salis fixi salis, gr. xviii. (E. terræ ℥j. 5iij.
 “ gr. xviii.) & jactura fuit ℥vj. 5ij. gr. lxx.” *Geoff.* ii. 637.

S E C T. III.

Myrrh may be given to ʒß. It is used in the Tinctura Laccæ, T. Myrrhæ,
 T. M. & Aloes, Elixir proprietatis utrumque, Pulvis Diatesfaron, Mithrida-
 tium, Theriaca *And.* Th. *Edinensis*, Pilulæ Rusi, P. gummosæ, P. pectocales,
 M m m 2 P. Sto-

P. Stomachicæ, Trochisci Cypheos, T. Hedychroi, T. de Myrrha, emplastrum cephalicum, & E. oxycroceum. In the *Pb. Edin.* ed. 1744. the oleum Myrrhæ, and several compositions in which Myrrh was formerly used are omitted.

Dosis ad ʒj Schrodero: ad ʒij. *Nucl. Belg.*: a ʒß. ad ʒß, *Geoff.* “Datur a ʒß ad gr. xv. in pilulis convenientius, & in parva dosi, ob insignem amaritatem; in majori dosi alvum laxat. . . In halitibus uteri putridis, & Myrr. gr. iv, croci gr. iij, zedoariæ ʒß, conf. anihos ʒ. f. F. bolus. . Convenit etiam, me experto, in tertiana & quartana, quas aliquando fugavi hoc modo. & Myrr. ʒß. salis absinth. ʒj. extr. gentianæ, vel absinthii, cent. minoris aa ʒß. F. pilulæ, paulo ante paroxysmum, etiam si placuerit diebus vacuis, assumendæ.” *Herm. Cyn.* 677. If you want the oleum Myrrhæ p. d. Mr. Geoffroy very particularly directs the making of it. It is now out of use.

O L I B A N U M.

S E C T. I.

Olibanum, Thus, & Thus masculum. *offic.* Thus sive Olibanum officinarum. *B. P.* 501. Thus, Arabibus Lovan, Avicennæ Conder, i. e. resina, dictum. *Garc. Clus. Exot.* 157. Thus. *J. B.* ii. 2, 302. *Ger.* 1435. Olibanum, sive Thus. *Park.* 1602. *R. H.* 1840. Olibanum or Frankincense:—which is a hard, yellowish-white or light-brownish coloured gummy resin, scarcely pellucid; in drops of different figures and sizes, often roundish; of a warm, bitter, resinous taste, and fragrant smell.

“Sicca autem, at pinguior tamen est Thus lachryma, quam mastiche, statimque in luculentam, pertinacemque flammam exardet, odore multo imbecilliore, sed nihil per incendium stillat, ut mastiche: dentibus statim friatur, iis adhærescit, nec cogitur denuo. Sapore est amaro, & modice acris, non ingrato tamen, Cæsalpino adstringente subamaro: colore est ex albo fulvescente, minusque pellucet quam mastiche, colore candicante, aut subruffo; translucidæ guttæ, alias singulares, alias gemellæ testiculos aut mammæ, prout eæ majores minoresve fuerint, imitantur, unde & mammosi & masculi Thuris cognomenta: interdum quaternæ aut quinæ, magnitudine cicëris, avellanæ, & majores; adhærentes nonnunquam suo cortici, unde exsudarunt: friatur vero immundior, ex grumorum attritu decussa, manna Thuris apud Græcos appellatur.” *J. B.* l. c.

By the bark sometimes adhering to it it appears to be the gum of a tree, which is said to grow in Arabia; but what kind of tree it is, we are to this day ignorant; although the Olibanum has been known and used as early as we have any account of such things; being mentioned, not only by *Hippocrates*, but by *Moses*, *Exod.* xxx. 34. . . . “Sola India nigrum Fert ebum; solis est Thurea virga Sabæis,” says *Virgil*, *Georg.* l. 2. v. 116. “Ex Turcia & India Orientali ad nos transportatur.” *Dale* 349. “It is brought into France by the way of Marseilles. That which comes from the Indies is not so good.” *Sav. Diët.* i. 1804. “Olibanum is taxed as a commodity coming from the Levant.” *Id.* ii. 896. “Encens comes from Alexandria
“ in

“ in Egypt to Marfeilles, to the quantity of three or four quintals in a year.” *Id.* iii. 483. “ Olibanum is brought from the Indies.” *Miller's Bot.* 320. According to *Mr. Geoffroy*, some write that Arabia Sabæa only produces Thus; others that Ethiopia also yields it, “cujus quidam populi Sabæi quoque nuncupabantur.” ii. 550. An recte? Minimè.

I shall not take time to repeat what authors have said of this tree, since there is little agreement among them, and as little certainty. Consult, if you please, *Theophrast. Hist.* l. 9. c. 4. &c. with *Bodæus*, p. 979. *Dioscor.* l. 1. c. 81—84. *Plin.* l. 12. c. 13. p. 307. Or, instead of all these, *J. B.* l. 1. and observe that the Olibanum is a modern corruption of λιβανος, for so it is called by Theophrastus, Dioscorides, &c. and is *Thus* in Latin. Hippocrates has λιβανωτος ἀρσην; and also, according to *B. P.* 399, λιβανωτε καρπος, for the gum. From λιβω, stillo, comes λιβανος; as from θυω, suffio, sacrifico, Thus, whence θυος and θυμιαμα, suffitus, incensum, and thence our incense, and frankincense. The use of incense in sacrifices, as directed by the Mosaic law, was very great; as it was also in the pagan world: and many Christian churches have not yet laid it aside in their religious assemblies; for which there may be several reasons.

“ Quod ex eo guttæ rotunditate pendit masculum vocamus; cum alias “ non fere mas vocetur, ubi non sit fœmina. Religioni tributum, ne sexus “ alter usurparetur. Masculum aliqui putant a specie testium dictum. Præ- “ cipua autem gratia est mammoso, cum hærente lachryma priore consecuta “ alia miscuit se. . . Micas concussu elifas mannam vocamus.” *Plin.* l. 12. c. 13. p. 307. “ Verbenasque adole pingues & mascula Thura.” *Virg. Ecl.* 8. v. 65. “ Ratione figuræ est vel Indicum, quod est in glebis; vel mammosum, quod “ est in guttis; vel masculum, quod est in granis.” *Herm. Cyn.* 646.

S E C T. II.

It is attenuant, diaphoretic, cordial, and anodyne; called cephalic, pectoral, stomachic, and vulnerary: and is commended internally in coughs, vomitings, fluxes, hæmorrhages, as agreeing with mastich in virtues, though it partakes much more of the nature of myrrh; and externally may be of use in pains, wounds, ulcers, &c.

“ Calfacit 2. siccatur 1. subastringit. *Ufus præcipui* intrinsecus ad varios capitis & pectoris affectus, ut & ad alvi, uterique profluvia, ad tussim (deglutitur vesperi frustatim) vomitum, sanguinis excreationem, diarrhœam, dysenteriam, mitigandam. Extrinsicus inservit suffitibus pro capite roborando, catarrhos discutit, cava ulcera carne replet & ad cicatricem perducit, cruenta vulnera cephalica inprimis glutinat, perniones (cum suillo adipe aut anserino) sanat, ulcera cacoethea, tum sedis, tum aliarum partium demulcet (tritum cum lacte in linimentum) oculorum rubedini ac lippitudini medetur, (scil. aqua rosarum multiplici extinctione Thuris imprægnata, lactique muliebri postmodum commixta, pro collyrio liquido) verrucas incipientes & impetigines abigit (cum pice & aceto impositum). *Præp.* 1. Liqueor (sit ut liqueor myrrhæ) summe prodest ad maculas abstergendas, cavitatesque cicatricum explanandas. 2. Elect. Diaolibanum.” *Schrod.* 750. Ex *Dioscoride* præcipue.

1. It is a subacid, aromatic, bitter, gummy rosin. Vid. *J. B.* supra. "Saporis est amaricantis, resinosi; odoris fragrantis. Mastiche fragrantius & suavius, cæteroquin cum ipso convenit." *Herm. Cyn.* 646. "Saporis amaricantis & resinosi; odoris fragrantis. Stillat sponte sua ex arbore." *Dale* 349. "Saporis resinosi, amari, subacris, adstringentis; odoris, cum accenditur, fragrantis & gravis." *Albin. MS.* "Salivam reddit lacteam dum manducatur." *Nucl. Belg.* 291. "Saporis amaricantis, modice acris, & resinosi non ingrati; odoris fragrantis." *Geoff.* ii. 349. On red-hot iron it melts only in part, but does not run like mastich, still retaining its figure; then it flames long, becomes red and at last white, leaving a sixth part, or more, of its weight in white ashes, viz. two out of eleven parts. Hence it differs much from mastich; as is evident also in chewing them; and is not a pure rosin. — 2. The liquor or oleum p. d. Olibani & myrrhæ have the same effects attributed to them, as they are prepared the same way. Besides—3. Olibanum is supposed to be not only anodyne, but also somniferous, if not somewhat narcotic. "Verum in secunda valetudine haustum (infantiam Matth.) furorem (*μανίαν* ἔσται) inducit, & largius cum vino potum etiam interficit." *Dioscor.* l. i. c. 81. p. 46. "Verum (says *Geoff.* ii. 552.) Galenus & cæteri medicinæ scriptores, hac de Thuris noxa alte silent. Nihilque noxium in illius usu quotidiano deprehenditur." Yet Galen (l. 2. κ. τοπ. fol. 137. B.) says, "In dolore capitis, & omnibus aliis circa caput obortis affectionibus, vitanda sunt viticis semen, absinthii succus. . . Amplius autem offendunt myrrha, thus, hederæ cacumina, &c." Although elsewhere he makes it anodyne again and again; and also compares it, in some of its effects, with myrrh and crocus. "Revera totum id quo officit consistit in humiditate excrementitia, qua soporiferum est." *Hoffman*, p. 453. § 11. Avicenna owns it causes head-achs sometimes. "Et quando, says Serapio, bibunt de eo sani, parum meliorat eos, sed si nimis cum vino biberint, inducit maniam, & amplius cum vino occidit." Vid. *J. B.* i. 2, 307. who is against using it, not only internally, but even in suffitu also. Upon the whole, I think, its effects very analogous to those of myrrh; and where the one is hurtful the other should be shunned: and consequently that it cannot be a proper remedy in hæmorrhages, or inflammatory diseases: neither do I see cause to call it astringent; though, as diaphoretic, &c. it may sometimes do service in fluxes, coughs, and phlegmatic diseases. "Notat Avicenna Thus conferre rationi, ipsamque corroborare, & esse quosdam quibus præcipitur ut ejus infusum assuescant jejuni, sed ejus usum plurimum dolorem capitis excitare. . . Avicenna etiam usum Thuris plurimum cum vino interficere pronunciavit, ac similiter cum aceto." *J. B.* i. 2. 307.

"Singulare specificum habetur adversus pleuritidem, præsertim epidemicam. Adversus hunc morbum Quercetanus in pharmacopœia laudat pomum excavatum Olib. pulv. ʒj repletum, postea operculo tectum, & sub cineribus coctum, quod æger deglutiat superbibendo aq. card. benedicti ʒiij: postea vero debite contactus sudet. Riverius in obs. testatur multos ex pleuritide ad extrema fere redactos, usu illius pomi cum Olibano cocti restitutos vidisse; unde præter spem vel copiosus sudor, vel anacatharsis libera sequebatur. Hoc remedium sæpe felici cum successu, post V. S. bis terve celebratur. Hoc remedium sæpe felici cum successu, post V. S. bis terve celebratur. Si prima vice exhibitio remedio, sudor non

"suc-

“ succedat, post sex horas elapsas iterandum est.” *Geoff.* ii. 551. “ This method was followed for a whole year, at the hotel Dieu by Mr. Hangard, with surprising success; but the next year it had scarce any success at all.” *Douglas’s Geoff.* p. 362. A dangerous experiment may sometimes succeed, though imprudently made. Nature may only want a stimulus sometimes, to throw off what is hurtful; which may succeed, although contrary to what is indicated by the disease, and produce an effect contrary to the nature of the (stimulating) medicine, as here vomiting seems to have been. *Utatur ita qui vult, non ego.*

“ *Analyſi chymica Olibani lbij præbuerunt phlegmatis ℥ix. ʒij. gr. xviii; olei ℥xiii. ʒij. gr. liv. Carbonis fuerunt ℥v. ʒvij. gr. xliii; unde cinerum ℥j. ʒij. gr. vi, ac inde ſalis fixi alcali gr. xxii. (E. terræ ʒx. gr. lvi.) & jactura fuit ℥iv. ʒiii. gr. xxix.*” ſecundum *Geoff.* ii. 550. But here the ſum is lbij. ʒj: and by my experiment there ought to have been cinerum ℥v.

S E C T. III.

It may be given to ʒß. but the doſe is not generally determined. “ Doſis eſt a ʒj. ad ʒj. aut ʒij.” *Geoff.* ii. 551. I think it ſafer to keep within bounds than to exceed.—It is uſed in the diſcordium, mithridatium, the-riaca, pilulæ de ſtyrace, emplaſtrum deſenſivum, & empl. oxycroceum.

O P I U M.

S E C T. I.

Opium, Opium Thebaicum. *offic.* Opium Acoſtæ. *Cluſ. Exot.* 257. *B. P.* 494. *J. B.* iii. 392. *R. H.* 854. Opium Mauritanis & Indis Oſium. *Garc. Cluſ. Exot.* 154. Opium quod Aſia cum Ægypto Aſiun & Oſiun vocat. *Kæmpf. Amœn. Exot.* 642. Opium.—This is got from the

Papaver, Papaver album. *offic.* Papaver hortenſe, ſemine albo, ſativum Dioſcoridi, album Plinio. *B. P.* 170. Papaver ſativum. *Dod.* 445. *J. B.* iii. 390. *R. H.* 853. Papaver ſativum album. *Ger.* 369. Papaver ſimplex ſativum album. *Park.* 365. Papaver hortenſe. *H. Ox.* ii. 275. Papaver album ſativum. *Kemp. Am.* 639. Papaver foliis ſimplicibus glabris, inciſis. *H. Cliff.* 200. The White Poppy:—the milky juice whereof inſpiſſated is the Opium, which, as we get it, is a ſoftiſh, dark, reddiſh-brown reſinous gum, of a very hot bitter taſte; and ſtrong ſoporiferous ſmell: brought from the Levant and Eaſt-Indies in cakes of different ſizes.

That our Opium is the proper juice, and neither the extract nor expreſſed inſpiſſated juice, of this Poppy, is evident, not only from the teſtimonies of famous travellers, ſuch as Garcias, Bellonius, Tavernier, Kæmpfer, &c. but alſo from comparing the inſpiſſated milky juice, drawn from our own Poppies, with the Opium of the ſtrops, which agree in almoſt every thing; whereas the expreſſed juice and extract agree with it almoſt in nothing. To which I might add the reſinous nature of Opium, its ſtrength, and price. See theſe arguments.

ments at full length in the *Medical Essays*, Edit. 1747. Vol. 5. Art. 12. Sect. 1. p. 95—105. where the objections against it are also fully answered. And let me observe once for all, that what I design here is only an abridgment of that Essay or Dissertation on Opium, which you have, *Med. Ess.* 5. p. 93—147; which contains the fullest account of every thing concerning this celebrated drug that I can give.

That the Opium is got from the White Poppy is contradicted by some; the ancients being of opinion that it was from the Black. But it is the same Opium, whether from the one or the other: and the white having the largest heads of any here, it is probable they will be chosen; and that it is so is allowed by Garcias, Bellonius, and Kämpfer.

It is not certain when Opium was first introduced into medicine; but the little use made of it by Hippocrates, and Diagoras his cotemporary condemning its use in diseases of the eyes, makes it probable that its virtues were not known long before him. And it seems to have been but little used inwardly as hypnotic before Heraclides of Tarentum, *i. e.* for 200 or 300 years after Hippocrates: for although it has been the opinion of some of the learned that the Nephthes of Homer was Opium, which Helena learned of the Egyptians; yet this is but a meer conjecture without foundation, since none of the ancients thought so; and the names by which Opium is known in Egypt, as well as in Arabia, Persia, India, are evidently derived from the Greek *Opion*, though none of its most ancient names.

As for the Poppy; it is evident, that on some account or other it was carefully cultivated long before Hippocrates was born: for even Homer mentions the *μηκων ἐνι κηπῶ*; and the Papaverum capita in Tarquin's gardens are celebrated by all the Roman historians. The invention of it is attributed to Ceres, thence sometimes called Mecone; not on account surely of its narcotic quality, but because of its seed being very early used in food, and particularly in deserts: it is called nourishing by Hippocrates.

It is also certain that our Poppy is not specifically different from the *μηκων* and Papaver of the ancients; as will appear to any who will compare what is to be found here and there in Theophrastus, and in Dioscorides concerning it, with the plant before us; and consequently that our Opium is the same with theirs.

S E C T. II.

Opium is anodyne, hypnotic, narcotic, diaphoretic, antacid and cordial: it relaxes the fibres, thickens the humors, and checks all violent motions; is called attenuant, astringent, and cooling; and commended in intense pains, watchings, spasms, spleen, vapours, fluxes, hæmorrhages, the tenesmus, and indeed in all diseases from tension or irritation of the nerves, irregular motions of the spirits, or from thinness or acrimony of the fluids.

“ Opium vim possidet spiritus commotos, inquietos, seditiososque compescendi, facultatique animali, peculiari quadam proprietate, torporem inducendi. Unde somnus, sensibilitatis imminutio, &c. Media sane maximi solaminis in vigiliis, doloribusque intensis. Verum enimvero nec & suis incommodis Opium caret, nimirum præterquam quod excretiones urinæ & fæcum

“fœcum supprimat, malignitatem quoque exercere aptum est. Hac videlicet livorem artuum, frigidofque sudores, respirationem parvam, ac difficilem, mentis alienationem, &c. inducit. *Scribonius*. N. De caliditate & frigiditate maxime controvertitur. Plurimi tamen cum recentioribus calidum id probant, inducti amarore, inflammabilitate, acredine, vi exulcerandi, &c. Alii cum majoribus frigidum id demonstrant, virtuti scil. insistentes narcoticæ, quam obtinet. Disputatio, mehercle, citra necessitatem. Etenim statuatur calidum, reputetur frigidum, quid inde? Nec enim in copia adhibetur tanta, ut metuenda inde inferre possit incommoda. Verumtamen calidum potius dicendum esse quam frigidum, potiores evincunt rationes: nec obstat vis narcotica, utpote quæ non a frigiditate, sed occultâ qualitate procedit. Similem enim *ναρκωσιν* observare licet in nonnullis correptis peste, febribusve malignis & ardentibus. In quibus sane quicumque narcotin ad frigiditatem referre voluerit, igni frigiditatem attribueret. *Præp.* i. Extractum. 2. Laudanum opiatum multiplex. 3. Laudanum liquidum varium, &c.” *Schrod.* p. 728 ad 734.

1. Opium is acrid, bitter, and strongly odoriferous. “Præstantissimus vero succus est, qui densus & gravis; odoratu soporifer, (*ναρωτικός*) gustu amarus, &c.” *Dioscor.* l. 4. c. 65. p. 267. “Opium non modo gustu amarum percipitur, sed etiam acre, adeo ut paululum in ore detentum, linguam & palatum exulceret.” *Matth.* 746. “Commansum dentibus adhærescit, saporemque amarum repræsentat; odore est viroso, *καρφησάπιω*, & candelæ admotum in luculentam flammam exardet.” *J. B.* iii. 395. “Est saporis, subacris, amari; odoris virosi, narcotici, & quasi stupefacientis.” *Herm. Cyn.* 624. “Odore soporiferum ac graveolens; sapore amarum & acre.” *Dale* 208. “Odoris est graveolentis, & saporis amari ingrati.” *Nucl. Belg.* 216. “Odoris virosi, soporiferi; saporis amari, acris.” *Geoff.* ii. 687. If one attentively tastes Opium, he will perceive first a nauseous and diffusive bitterness; then, in about half a minute, a pungent heat, affecting first and principally the tongue, then the palate, and last of all the lips in a lower degree. The heat continues more than fifteen minutes; the bitterness still longer, provoking a plentiful discharge of the saliva. It heats and irritates also the nose, creating an inclination to sneezing without effecting it. Hence were we to judge of the virtues we should reckon it diaphoretic, cathartic, and nervine. It certainly is diaphoretic, and may be called nervine; but not purgative, save sometimes accidentally. *Eraustus* thinks that, were it not for its vis stupefaciens, it would always prove cathartic. According to him therefore the narcotic vis has no dependence on its sensible qualities. And this will appear the more probable, if we consider that some narcotics are acrid, others mild; some bitter, others sweet; some odoriferous, others not so; some purgative, others astringent, &c. and yet all of them are anodyne, and almost equally narcotic and virulent, if the dose be proportioned to their strength: and also that there are cathartics, as acrid, bitter, and strong-scented as Opium, and yet no ways narcotic. We ought therefore to distinguish between the stimulating or narcotic qualities of Opium, at least we may conceive of them as different. Hence the controversy whether it is heating or cooling may easily be determined.

2. In a pound (or ℥xij.) of Opium there are about five ounces of gummy, four of resinous, and three of feculent parts; as appears by the experiments

related in the *Effay*, p. 115. by which also it is evident that water dissolves it as well as wine or vinegar, and better than rectified spirit; but proof spirits are its most complete menstruum, dissolving both the gummy and resinous parts.

3. The gum has the taste and smell of Opium, and the same effects. The rosin has no taste, and smells musty: but, dissolved in alcohol vini, it tastes of the Opium, and is anodyne and somniferous; but does not appear to have any worse effects than the gum, or at least not to be more virulently narcotic. Hence the narcotic virtue of Opium does not depend on its sulphur, whether it be called crassum, vaporosum, rarescibile admodum, or by any such imaginary epithet. Vid. *Eff.* p. 116.

4. Though Opium is rather alcalescent than acescent, yet it cannot be called an alkali. See the experiments in proof of this, *Eff.* p. 119—122. From which it follows that the essential salt of Opium is somewhat ammoniacal; that Opium contains very little acid; and that it acts on chalybeats like vegetable astringents in some degree.

5. The most active principles of Opium are not volatile, but very fixed: for it keeps long; loses nothing of value by drying: and little or nothing rises from it, even though fermented in distillation. Hence old Opium is as good, but not better than new. Roasting of Opium is useless; and aqua theriacalis is worth little.

6. By a chemical analysis ℥xvj. of Opium yielded phlegmatis subacidi ℥j. spiritus urinosi ℥iv. ℥ij. olei empyr. ℥ij. salis vol. urin. sicci circiter gr. iv. which, with 114 grains at most contained in the urinous spirit (discovered as in *Eff.* p. 125.) makes in all salis vol. ℥j. gr. lvij. So that opii gr. lxxvj. contain or rather yield but gr. j. salis volatilis. And there remained carbonis spongiosi ℥vj. which makes the quantity ℥xiii℥. gr. iv. and therefore there were lost ℥ij. ℥ij. gr. lvj. The carbo, long calcined, was reduced to cinerum ℥℥. gr. xlix, from which boiling water extracted ℥j. gr. lvij; and there remained terræ ℥ij. gr. lvij, which by a second calcination lost about gr. vj, and yielded to water again ℥j. ; so that the terra chymica was reduced to ℥ij. gr. xxv. There were some different appearances in the different analyses; for which vid. *Eff.* p. 123—128. From this it appears the virtues of Opium do not depend on a volatile salt.

7. Opium acts on (at least some) animals as it does on men, *i. e.* is innocent, hurtful, or poison to them, according to the dose. For (α) A frog, put into water in which there was some Opium dissolved, presently appeared uneasy; and next morning was dead, and much swelled. (β) A few drops of a solution of Opium, conveyed into a frog's stomach, killed it. See the phenomena, which are remarkably curious, *Eff.* p. 128—130. (γ) Opii ℥℥ dissolved in aquæ ℥iv. filtered and warm, was injected into the crural vein of a dog, but not all at once: the first fifteen drams had no effect observable; but after an hour ℥vii. more being thrown in, the dog was seized with convulsions, had a small and frequent pulse, and foamed at the mouth: but no signs of immediate death appearing for another hour, the remaining ℥ix were injected (not slowly as the rest were, but) as forcibly and quickly as could be; on which the pulse became full and slow, and in about a minute the animal expired. Nothing very remarkable appeared on opening the dog. Vid. *Eff.*

p. 131. (d) Opii ʒij, swallowed by a smaller dog, did not make him sleep, but deprived him of the use of his limbs; so that he could neither eat nor drink for four days; after which he recovered. Vid. *Eff.* p. 132.

8. Opium, outwardly applied, is anodyne, discutient, and seporiferous; having almost the same effects as when taken inwardly. One of the inconveniences accompanying the immoderate application of Opium, mandragora, hyoscyamus, for pains of the eyes, as observed by Galen, is a mydriasis, of which see an instance in *R.H.* p. 680. Vid. *Eff.* p. 132. Hence Opium and other narcotics, sometimes at least, impair the tone of the muscles, or cause a sort of palsy about the part to which they are applied. Vid. *Eff.* p. 133.

9. Opium rather thickens than thins the blood and juices. See the proof, *Eff.* p. 134.

10. Habit, or customary use, makes that quantity of Opium safe, yea beneficial, which would otherwise be poison. Though ʒj. or ij. is but a moderate dose to a Turk, yet a lady was killed by about twenty grains of it, with myrrhæ ʒij. Vid. *Eff.* p. 135.

11. The effects of Opium are very analogous to those of fermented liquors and vinous spirits. Only spirituous liquors, outwardly applied, rather contract than relax the fibres. *Eff.* p. 136—138. And

12. Opium, taken inwardly, acts primarily on the stomach, on which action its virtues chiefly depend. I have often observed a violent tenesmus removed in a moment by a few drops laudani liquidi, vomiting stopt, pain eased, and sleep procured the same way, and almost as soon. There are many instances in *Wepfer's cicuta aq.* of terrible symptoms, and death itself, caused by narcotics before they went out of the stomach, and without so much as inflaming it; or causing any observable alteration in it more than if it had been infused so long in warm water; far less vitiating the blood: as also of the same symptoms being removed, and death prevented by vomiting. A glass of new-drawn aq. menthæ simpl. threw a strong man into epileptic fits; and aq. hyssopi had the same effect on a woman not many years since. Vid. some *præcognita*, which might be here insisted on. *Eff.* p. 139.—I shall here only observe:

1. That pain causes, or is accompanied with, a contraction of the sensible fibres; and that sleep is a sort of palsy of the organs of sensation and voluntary motion. 2. That as the primary effects of a medicine have frequently several secondary ones, so the same simple sometimes differently affects the same nerve, or, at least, different nerves of the same part, so as to produce effects altogether independent of one another. This our taste, in many instances, can discover; and the taste of Opium, compared with that of other narcotics, evinces it to be the case here, *that is*, shews that the stimulating quality of Opium has very different effects from the narcotic quality. And 3. By comparing the effects of wholesome aromatics with those of virulent narcotics it will appear, that the stimulating or aromatic part of Opium is so intimately united to the narcotic, as in some measure to mitigate it, and render it more friendly to nature than the narcotics that want such a quality are, though otherwise much weaker than Opium. Such are the hyoscyamus, cicuta aquatica, solanum lethale, &c. Whilst both stimulating and narcotic qualities contribute greatly to the virtues of this famous medicine.——From the whole I infer:

1. That the virtues of Opium do not depend on its acting on the brain, or on the blood, but on the nerves.—2. That it affects first and principally the nerves to which it is applied, next such as are more immediately connected with them, then those which serve for sensation and voluntary motion, and the whole nervous system by consent. See this fully proved by experiments, in *Dr. Whytt's Essay on vital and involuntary motions*, p. 370—376. As also *Phys. Ess.* vol. ii. p. . — 3. That this influence on the nerves differently affects the sensorium commune, and the mind, according to its degree and the function of the nerves primarily (affected or) acted upon. *Ess.* p. 141. And—4. That the primary observable effect of the action or impression of Opium on the nerves is the relaxation of their fibres. But that this effect is, properly speaking, physical or mechanical, I cannot say: since I know not how custom can prevent the physical action of one body on another; or how *Opium* can in time become a cordial to one, whom at first it would have infallibly destroyed. Perhaps the sensation communicated to the brain by the nerves primarily affected may be the immediate cause of this relaxation: but how this is performed I cannot pretend to explain, more than how the images painted on the retina cause vision.

However, as the relaxation of the nerves, and consequently of the moving fibres, prove Opium to be more than a palliative in many diseases, so by this it is not difficult to account for its bad as well as good effects. For as by a moderate relaxation (accompanied with an agreeable titillation) it may prove anodyne, cordial, diaphoretic, hypnotic, &c. so by our relaxing it may cause stagnations, palsies, lethargies, deliriums, apoplexies, and death. See *Essays*, p. 142.

S E C T. III.

Opium is given to gr. j. ij. iij; but to such as commonly use it to a much greater quantity, viz. till it produces the desired effect. The most usual preparations are extractum, tinctura, laudanum liquidum Sydenhami, bals. anodynum Bateanum, pilulæ pacificæ: and it is the basis of the pilulæ e styraçe, diascordium, theriaca, and mithridatum.

It is an ingredient in the acetum theriacale, tinctura sudorifica, decoctum diascordii, electuarium antidyfentericum, & theriaca Edinensis. *Pharm. Edinb.* edit. 1744.

One grain of Opium is generally sufficient for a dose: and it is much safer to give too little than too much: for, its effects soon appearing, the defect may easily be supplied; but if too much is taken, the muscles may become paralytic, so that nothing can be swallowed; and all we can do is to endeavour to provoke vomiting by tickling the throat with a feather &c. or by clysters and cataplasms of tobacco and such like emetic applications; and at the same time rouse nature by strong sinapisms &c. If thus the unfortunate patient is enabled to take any thing, after emptying the primæ viæ, diaphoretics, with vinegar, or such kinds of acids, may complete the cure. I know not whether ever in these cases a vomit was conveyed into the stomach by a proper instrument; which I think is somewhere mentioned by Boerhaave, or his commentator the very learned Van Swieten.

The

The tinctura Opii is omitted in the *Pb. Edin. edit. 1744*; as is also Sydenham's liquid Laudanum. A tinctura Opii seu Laudanum liquidum, somewhat different from Sydenham's, is made to serve for both. The cloves and cinnamon are left out as useless, though the saffron is retained, and the menstruum is half canary and half brandy. In the narrative prefixed to *Pemberton's Lond. Disp. p. 81.* is the following remark: "In the Laudanum, which, for avoiding that fantastical name, is now called Tinctura Thebaica, the saffron with which the tincture has been loaded is a useless ingredient; it can have no other pretensions to a place here than upon the antiquated and ridiculous conceit of its defending against some imaginary ill effects of the Opium. Some spice, that may abate the ill odour of the Opium, will not be useless." I prefer Sydenham's receipt to both; being aromatised by saffron, as well as by the cloves and cinnamon, which also correct both taste and smell, and at the same time rather increase than diminish its anodyne and hypnotic virtues; as is evident from the nature of saffron, as well as from the long experience of the effects of this composition. Vid. *Pilulæ e styrace Pb. Lond. 121.* which is as follows: "R styr. cal. ʒj, croci ʒj, Opii colati ʒv. Contunde simul &c." The menstruum in the tinct. Opii seu Laudanum is changed; because, when sherry was used, there was after some time a precipitation, or separation of somewhat from the solution. But what then? Is the medicine the worse? By no means. Besides, if there be of good sherry p. 12. for Opii p. 1. the separation is inconsiderable. I have it sixteen years old, and as fine and good as ever: and need it be kept so long? I own it adds to the esteem this composition really deserves, that it bears so great a name as Sydenham's—And however fantastical Laudanum may appear, in my opinion *Tinctura Thebaica* is to the full as improper a name for a solution in wine of an East-Indian or Turkey juice: much more being brought from Smyrna, Aleppo, Satalia, than from Egypt. Where Thebes in Egypt stood is not now known.

For the pil. pacificæ vulgò Matthæi. *offic. vid. Eff. p. 145.* It has now lost the serpentaria, and doubled the castor: but it is neither better nor worse than it was. In the *Pb. Ed. edit. 1756*, it is new modelled, sapo tart. being omitted, as well as Capivi; and gum. ammon. and syr. of sugar substituted in their place.—In the pil. e styrace, edit. 1744, the bals. Tolutanum & myrrha are omitted, and gum. tragacanthæ used for them: but, instead of pil. e styrace, we have pil. ex olibano, into which myrrha is again received. Is the pill bettered thereby?—The bals. anodynum Bateanum is also altered: but, whether made better or worse, it differs from that of *Bates*, and so should not retain his name.

S E C T. IV.

POPPY HEADS partake of the virtues of Opium: of them is prepared the syrupus Papaveris albi, seu de meconio, vulgò diacodion. *offic.* The seeds are nourishing and antacid, used only in emulsion, and but seldom. The flowers, though of the same nature, are reckoned more cooling, or rather weaker; and a syrup made with them is commended in the pleurisy, and other inflammatory diseases.—They are the produce of

Papaver rubrum, Papaver erraticum, Papaver rhœas. *offic.* Papaver erraticum majus; *scias* Dioscoridi, Theophrasto, Plinio. *B.P. 171. T. 238.* Papa-

ver erraticum rubrum campestre. *J. B.* iii. 395. *Papaver erraticum.* *Dod.* 447. *Papaver rhœas.* *Lob.* 143. *Ger.* 371. *R. H.* 855. *Papaver erraticum rhœas* five sylvestre, *Park* 367. *Papaver rhœas.* *Mer. pin.* 90. *Papaver erraticum majus* seu *paus* Dioscoridis, Theophrasti, & Plin. *H. Ox.* ii. 277. *Papaver laciniato folio*, capitulo brevior, glabro, annuum rhœas dictum. *R. Syn.* 308. *Papaver foliis pinnatifidis*, hispidis, fructu subrotundo. *H. Cliff.* 201. Red Poppy, or Corn-Rose.

This and many varieties of it, as well as the varieties of the Garden Poppies, have all the same taste and smell, belong to the same genus, are all lactescent; and the milky juice inspissates a real Opium. The strength therefore of the syrups is in proportion to the milk the heads and leaves contain; but how much Opium is contained in *Pap. albi capitum* ℥iv, modicè siccatorum; whence syr. ℥viiij. *circiter*: or in *Papav. rhœad. florum* ℔j. recentium, whence *about* syrapi ℔iv. are got, I cannot determine; and consequently know not exactly what proportion the strength of these syrups bear to one another, or to that of Opium. Sydenham makes diacod. ℥j. as strong as, or equivalent to, his Laud. liquidum gut. xvj. I doubt of its being near so strong. However there is no danger in giving ℥ij. of either of the syrups. N. B. It ought not to be *modicè siccatorum*; for this leaves such a latitude, that the syrup may be much stronger or weaker according to the degree of exiccation: neither need *mediocriter maturorum* have been added. The seeds, contributing nothing of consequence to the syrup, should also have been taken out.

“The flowers of the Red Poppy are of a cooling anodyne nature, in some measure hypnotic . . . and are a noted remedy against surfeits, especially the infusion of them in brandy, or the tinctura *Papaveris officinarum.*” *Miller’s Bot.* 331. A tinctura *Papaveris composita.* *Ph. Lond.* edit. 1720. was thus prepared: “℞ Fl. *Papav. errat.* ℔ij, nucis moschatæ incisæ ʒij, sacchari albi ℥ij, sp. vini Gallici ℔iv. Extrahatur leni calore tinctura.” But this is thrown out of the *New Lond. Disp.* N. B. The preparation of the two syrups of Poppies are accurately described in this *New Pharm. Lond.* and must be vastly stronger than ours. Vid. p. 101. and *Schroder*, p. 640—642.

L E C T U R E LXXVI.

S A N G U I S D R A C O N I S.

S E C T. I.

SA N G U I S Draconis, *offic.* Sanguis Draconis officinarum. *B. P.* 499. Sanguis Draconis. *Matth.* p. 934. *Mon. Clus. Exot.* 330. *J. B.* i. 402. *R. H.* 1598. “Sanguis Draconis. *off.* *κίρρακαρις* Dioscoridis, *ἄιμα δράκοντος* Græcorum recentiorum. Alachnen Arabum.” *Geoff.* ii. 557. At “Cin-
nabarum quidam *ἄιμα δράκοντος* esse existimaverunt,” ait *Dioscorides*, l. 5. c. 109. p. 367. Dragons Blood—is a solid, brittle, resinous substance, in drops or masses of a dark red colour, when powdered of a bright crimson; without taste or smell.

“We

“ We have three ſorts of Dragons Blood to be met with in the ſhops:
 “ 1. of a coarſe dull colour, made up in lumps and cakes; when powdered
 “ of a little better colour than bole Armenick. The 2. is alſo in lumps, of a
 “ pure red colour, almoſt as fine as the drops; though it has fragments
 “ of leaves and the like ſtuff among it. The 3. is that which is in drops,
 “ wrapt up in pieces of palm-leaves, of a pure bright crimſon colour when
 “ powdered, but appearing blackiſh on the outſide before it is beat to pow-
 “ der.” *Miller’s Bot.* 389. “ The beſt and pureſt ſort is brought from the
 “ Eaſt-Indies, in oval drops, wrapt up in ſlags; or in large maſſes, which
 “ are evidently compoſed of ſmaller tears. The writers on the *M. M.* have,
 “ in general, given the preference to the firſt; but we have ſeen them both
 “ of equal goodneſs.” *Lewis’s Pharm.* p. 59. “ The Dutch and Engliſh
 “ bring it from the Indies, it comes alſo from the Levant, by Aleppo. It is
 “ of three ſorts; and there are annually imported to Marſeilles of that *en larmes*.
 “ between fifty to ſixty pounds; *du fin*, from one to two quintals; and as
 “ much *du moyen*. The firſt is valued from ſeven to eight livres; the ſecond
 “ from four to five, and the third from thirty to forty ſols the pound weight.”
Sav. Diſt. iii. 559.

It is ſaid to come from both the Indies, Levant, Madagaſcar, and the Canaries; and to be got from very different plants, of which the following is one:

Draco arbor. *Cluſ. Hiſt.* p. 1. *B. P.* 505. *Lob.* 639. *J. B.* i. 402. *Ger.* 1523. *Park.* 1531, 1598. *Palma*, prunifera, foliis yuccæ; tractu in racemis congeſtis, ceraſiformi, duro, cinereo, piſi magnitudine; cujus lachryma Sanguis Draconis eſt dicta. *H. Amſtel.* in 8vo. p. 261. *Sloani Cat. Jam.* 179. *Hiſt.* i. 20. *Palma*, foliis longiſſimis, pendulis, abſque ullo pedunculo, ex caudice glabro enatis. *J. B.* ii. 169. The Dragon-tree.—This grows in the Canaries. “ In inſulæ Maderæ ſepibus, prope urbem Funchall collegi.” *Cat. Jam.* 179. *Dale* has alſo a Dragons-blood cane, p. 266; another Dragons-blood tree, p. 272. of the palm kind; and one called Angſana, p. 337. on which he ſays, “ Unde non poſſum non obſervare, quod botanices auctores quænam arbor ſit, valde incerti ſint, & magna obſcuritate ac confuſione laborent, aut di-verſas arbores eſſe quæ hoc gummi producant.” *Pharmacolog.* 338.

The Dragons-blood moſt common in our ſhops, in roundiſh or longiſh lumps, of an obſcure dirty-red colour, is reckoned factitious, and ſuch as ought not to be uſed inwardly. The Dutch are ſaid to put off gum ſenegal, coloured with Braſil, for Dragons-blood. vid. *J. B.*

“ Milton vocant Græci minium, quidam cinnabarin: unde natus error In-dico cinnabaris nomine. Sic enim appellant illi Saniem Draconis elifi ele-phantorum morientium pondere, permiſto utriuſque animalis ſanguine, ut diximus.” *Plin.* l. 33. c. 7. vid. *Monard. Cluſ. Exot.* 330. That this is the Cinnabari Dioſcoridis I cannot aſſert.

S E C T. II.

It is called aſtringent; and is commended internally in fluxes and hæmorrhages, &c. and externally for ſpongy gums, looſe teeth, &c. But as there
 is

is reason to doubt of its stipticity, I can affirm nothing concerning its virtues. Perhaps it may be called antiseptic, if genuine; and diuretic: *fortè purgat*.

“Sunt qui Dioscoridis cinnabarium esse velint. *Vires*. Refrigerat (aliis caliditate & frigiditate temperatus est) exiccat strenuè, astringit, repellit. *Ufus* ejus est *præcipuus* extrinsecus in exiccandis catarrhis (impositus capiti) in hæmorrhagia sistenda, vulneribus glutinandis, dentibus laxis stabiliendis. *N.* Umbilico impositus quoque dysenterix prodesse dicitur. *Præpar.* nulla inde prostant; depurari tamen potest, si in aqua decoquatur, a fæcibus decantetur, & denuo inspissetur.” *Schrod.* 741. “Solvitur quidem in aqua, quam lacteam quasi reddit, sed sine mixtione, quippe refrigerata aqua subidet iterum, parietibusque vasis adhærescit.” *Ibidem*.

The most genuine Dragons-blood that I have seen has neither taste nor smell. “Pulchros S. D. grumos asservamus, glebis thuris æquales, rotundos ut plurimum; alios inequales, foris ferrugineos, fractos pellucidos, coccineos, dentibus fragiles, saporis expertes, salivam statim & affatim rubore tingentes.” *J. B.* i. 402. “Non existimamus frigidum & siccum esse 3. gradu ut *Lonic.* scribit: nullam etiam insignem vim hætenus animadvertimus in legitimo ad reprimendos fluores sanguinis. In adulterino ob admixta adstringentia majorem credimus.” *Ibid.* p. 405. “Est substantia gummosa & resinosa, rubicunda. . . Saporis adstringentis & viscosi.” *Herm. Cyn.* p. 719. “Resina est obscura, rubra. . . Saporis resinosi & adstringentis.” *Dale.* p. 272. “Est substantia gummeo-resinosa. . . Saporis austeri & viscosi.” *Nucl. Belg.* 255. “Substantia est resinosa. . . Saporis experts, sicut & odoris, nisi cum incenditur, tum enim odorem exhalat ad styracis liquidæ odorem proximè accedentem.” *Geoff.* ii. 557. “Sanguis D. sp. vini infusus, sanguineum colorem emittit elegantissimum; cum aqua autem, oleo, vel alio liquore vix aliquem.” *Hoffm.* in *Schrod.* p. 529. “In aqua & oleo difficulter dissolubilis est.” *Nucl. Belg.* 255. It melts, flames briskly, and consumes in the fire, but not intirely, leaving a little earthy ashes behind it: its smoke smells partly sweet, and partly fetid, and provokes coughing; and seems not to be (at least much of what is sold for it) a pure resin, but somewhat gummy. “Sanguis D. genuinus aqua non solvitur, sed spiritu vini & oleosis substantiis. Fumus, qui ex eo incenso exhalat, subacidus est, qualis ex benzoino elevatur. Resina est composita ex oleo crasso, copioso, & acido sale simul permistis: parum vero partium volatiliū oleosarum continet, ut ex eo concludi potest quod odoris & saporis sit experts. Vi pollet incrassante, exsiccante, & adstringente; & in dysenteria, hæmorrhagiis, & vehementioribus fluxibus, ac ulceribus internis, utiliter adhibetur internè ad ʒß. ad ʒj. Externè ulcera exsiccat, vulnera glutinat, commotos dentes firmat, & gingivas roborat.” *Geoff.* ii. 564. who thus gives its principia, without analysing; and virtues but badly founded on its sensible qualities. I discovered neither acid nor the scent of styrax, nor benzoin, in the smoke; but something like the smell of honey, accompanied with the fumed scent of storax liquida. — 2. We are not certain what tree it comes from; or whether we have any genuine; or it be a natural tear: nor do we know whether what we have be of the same nature (about which authors differ so much) or not. And—3. Its astringency, &c. seems to have no other foundation but the opinion of its being the cinnabari antiquorum: and there will still appear less reason for it

if it become very acrid when dissolved in spirit or oil, as has of late been asserted. "It is not at all acted upon by watry liquors, but totally dissolves in spirit of wine, gives a red colour and hot pungent taste to oils, &c." *Lewis's Disp.* p. 59. vid. *Pharm reform.*—"When dissolved it discovers some degree of warmth and pungency." *New Disp.* p. 198.

S E C T. III.

The dose is a ʒss. ad ʒj. according to *Herman* and *Geoffroy*. I am not for giving it at all till we know somewhat more about it. It is in the pulvis stypticus, electuarium antidyfentericum, balsamum Locatelli, & emplastrum defensivum *Pb. Edinb.* and in the emplastrum roborans *Pb. Lond.*

S A R C O C O L L A.

S E C T. I.

Sarcocolla. offic. *Sarcocolla. B. P.* 498. *Park.* 1544. *R. H.* 1847. *Sarcocolla officinarum.* *J. B.* i. 2, 308. *Sarcocol*—is a light, spongy, friable, resinous gum, in small grains, of a yellowish colour; of a bitter, nauseous, sweetish taste; and no smell.

"It is said to come from Persia; but we have no knowledge of the tree that produces it." *Mill. Bot.* 394. Some make it a prickly leguminous flowered and coddled tree; others, which is more probable, a (prickly) *tithymalus*, because "Admixta reperiuntur aliquando folia ex candido flavescentia, thymali myrsuntis folia sicca egregie referentia." *J. B.* "Ex Persia ad nos transfertur." *Dale* 345. "Ex Persia & Arabia affertur." *Geoff.* ii. 646. Some say the tree grows in Arabia Deserta or Petræa; others in Persia: the gum is taxed as a commodity from the Levant. *Sav. Diæt.* ii. 1483. "Sarcocole, the gum of a tree used in medicine, comes to Marseilles from Persia by Aleppo, from two to three quintals per annum." *Sav. Diæt.* iii. 559. An *Sarcocolla antiquorum*? Probabiliter.

"*Sarcocolla lachryma est arboris in Perside nasentis, thuri tenui similis, subfulva, gustu amariuscula. Vim habet vulnera glutinandi, & oculorum fluxiones inhibendi. Inferitur & emplastris. Cæterum admixto gummi adulteratur.*" *Dioscor.* l. 3. c. 99. totum. p. 217. "Sic & Galeno 8. *Simpl.* *Lachryma arboris Persicæ. Plinio,* l. 13. c. 10. Fit & ex *Sarcocolla*, ita vocatur arbor, gummi utilissimum, simile pollini thuris, & ideo candidum quam ruffum melius: & l. 24. c. 14, sunt qui *Sarcocollam spinæ lachrymam* putant, pollini thuris similem, cum quadam acrimonia dulcem." *B. P.*

S E C T. II.

It is probably such a purgative as is the cataputia; and outwardly detergent, and attrahent or epispastic; and so may be of use in foul ulcers, carious bones,
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and fixed pains; called a phlegmagogue, and also astringent; and commended for coughs, asthmas, sciaticæ: but it is now used almost only for sore eyes. In my opinion the *M. M.* might very well do without it.

"Calfacit & siccat 1. astringit, consolidat, glutinat, coquit, maturat. " *Usus præcipui* in vulneribus extergendis, consolidandis, cicatrice obducendis, " &c. Mirifice prodest & in oculorum fluxionibus, albugine, nubeculis " (maceratur in lacte asinino vel humano diebus quinque, postea cum aqua rosa- " rum mixta, ciliis imponitur, addita si libet tantillo sacchari) in hæmorrha- " gia narium (anacollematis immiscetur). *N.* Sunt qui propinant purgandi " gratia, crassosque & viscosos humores, ex partibus diffitis, e. g. ab articu- " lis, pulmonibus illa retrahi scriptitant. *Dosis* ʒj. corrigenda est ut sagape- " num. *Præp.* Pilulæ de Sarcocolla compos." *Schrod.* 741..

1. It is a subviscid, bitterish and nauseous resinous gum, of a tithymalus probably. "Saporis amari, cum quadam ingrata dulcedine obscura: sub " dente lentescit, & candelæ admota primum bullat, postmodum in claram " flammam exardet." *J. B.* "Sapore amara, dulcedinemque (glycyrrhizæ " æmulam) post se relinquente: substantiæ est viscosæ, glutinosæ, &c." *Schroder.* "Est collecta ex tithymalo Persico, spinoso, Sarcocollifero, saporis " amaricantis, cum obscura quadam dulcedine; odoris dum incenditur ingrati." *Herm. Cyn.* 701. "Saporis est amaricantis & lenti, obscura quadam dulcedine." *Dale* 345: "It is of a viscid and somewhat bitterish taste, with a sweetish relish." *Mill. Bot.* "Saporis est subacris, amari, cum quadam ingrata dulcedine ob- " scura, nauseam provocantis." *Geoff.* ii. 646; who adds, in aqueo liquore dissolvitur: and *Lewis (Pharm.* p. 60.) says, It is of a bitterish and nauseous sweet taste, and dissolves in a good measure in water. Hence it appears to be really somewhat purgative, though the Greeks took no notice of this quality. But what claim it has to astringency I see not: neither what service it can do in diseases of the eyes, if it be not by an irritating detergency. — 2. "Analyti " chymica ex Sarcocolla lbij. prodierunt humorum ʒxj; olei ʒvij. ʒviß. Car- " bonis fuere ʒvij. ʒvj. gr. lxxvi: unde cinerum ʒvij. gr. liv; ac inde salis fixi " falsi ʒj. gr. ix. & jactura fuit ʒv. ʒij. gr. xlij." *Geoff.* ii. 646; who hence makes it a compositum gummosum seu saponaceum, aliquantisper resinosum; adding: "Vulnera abstergit, consolidat, & cicatrice obducit." — 3. The Arabians themselves seem not to have had a very good opinion of it. "Pur- " gat pituitam crudam, & humores alios crassos, præcipuè a cerebro, nervis, " juncturis, ut ischio, pulmonibus. Ob id senibus pituitosis, asthmaticis, " tussientibus prodest, sed calvitium accersit. . . . Ventriculo calido & bilioso " est nocentissima Sarcocolla ob id vitanda picrocholis est; aliis datur a ʒj. ad " ʒij." *Mesue, Simpl.* l. 2. c. 18. p. 69. "Facultatis purgatorix non me- " minere Græci, Mesue, & Avicenna; nec laudant nec vituperant; Serapio " pro cathæretico habet, & pro p. 1. Sarcocollæ, accipit olei, p. x. ac si " euphorbium foret. Scribunt autem purgare pituitam crassam, & quidem " a remotis partibus, veluti oculis, cum quibus habet tantam affinitatem, ut " purgandi gratia in illis data, exulceret. Misera affinitas! quam hostibus " optem. Mesue dat in substantia a ʒj. ad ʒij. quod ego ne in pilulis quidem " audeam, quantumvis bene correctæ videantur. . . Abeat Sarcocolla, cum " pilulis suis in maximam malam rem." *Hoffman,* p. 66 and 67.

Dosis ʒj. Schrod. ad ʒij. Mesue. “Serapio extus comedere carnes ulcerum; intus exulcerare intestina & inducere calvitiam asserit. Nihilominus proponit internum illius usum a ʒj. ad ʒijj. modo sicut euphorbium oleo nucum vel amygdalino temperetur.” *Geoff.* ii. 647. It is an ingredient in the trochisci albi rhasis *Pb. Edin.* 1744; which are composed of cerussa, Sarcocolla, tragacantha, amyllum, & camphora; an odd hotchpotch! The pulvis è cerussa compositus *Pb. Lond.* consists of ceruss. ʒv, Sarcocol ʒiʒ, tragac. ʒʒ, powdered together. Neither of them are worth much.

S C A M M O N I U M.

S E C T. I.

Scammonium, *effic.* Scammonium, *B. P.* 495. Scammonium, Succus Scammoniaë densatus. *J. B.* ii. 164, &c. Scammony.—This is a light, friable, greyish-black resinous gum, or rather gummy rosin, brought from the Levant in large somewhat shining lumps, of a whitish ash colour when powdered, and white when wetted; of a penetrating subacid taste, and disagreeable smell, while recent. It is the inspissated or concrete juice of the root of the

Scammonia Syriaca, *P. B.* 294. *R. H.* 722. Scammonia Syriaca, flore majore convolvuli, *J. B.* ii. 163. Scammonia Syriaca legitima, *Park.* 164. Scammonium, *Dod.* 391. Scammonium Syriacum, *Ger.* 866. Scammonium Syriacum, Antiochenum, *Lob. Adv.* 272. Convolvulus, Syriacus, & Scammonia Syriaca, *H. Ox.* ii. 12. *T.* 83. Convolvulus foliis sagittatis, minoribus posticè truncatis. *H. Cliff.* 66; where it stands as a varietas *C. majoris albi*, *P. B.* “Differt a vulgari, ait Linnæus, foliis minoribus, structuram aliam differentem non observavimus.” *H. Cliff.* p. 67. It grows in Candy, Syria, &c.

The best Scammony comes from Aleppo. That from Smyrna is very acrid and burns the mouth. *Vid. Mr. Bolduc, M. Acad.* an. 1702. p. 248. “The best comes from Aleppo; that which comes from Smyrna being fuller of dross and sand.” *Mill. Bot.* 401. Whether there is mixed with that from Smyrna the juice of some spurge, or it is got from a different species, I know not.

“Scammonia ramos ab una radice multos profert, ternum cubitorum, pingues & quadantenus hirsutos: foliis itidem hirsutis helxinæ aut hederæ similibus, sed mollioribus ac triangulis: floribus albis, rotundis in modum calathorum concavis & graveolentibus; radice prælonga, crassitudine brachiali, candida & gravis odoris, lætisque succi plena; qui quidem legitur hunc in modum: capite exempto radix ita cultro incavatur, ut excavatio sensim a latiore orbe in acutum desinat, proindeque in id cavum confluit succus, qui conchis demum excipitur. Alii postquam scrobes in terra concamerato sinu effoderunt, juglandum folia insternunt, in quæ radice incisæ succus diffundatur, eumque inibi siccatum tandem auferunt. Bonitate præstat, qui pelucidus est ac levis, rarus & colore glutini taurino similis, rimulis fistulifve tenuibus, atque fungosus, qualis scil. ex Mysiæ regione Asiæ deportatur. . . Attendendum est si non vehementer linguam excalfaciat exurative; id quod

“ & misti tithymali succi argumentum est. Syriacus autem & Judaicus deter-
 “ rimi habentur, graves, densi, ervi farina, & tithymalo adulterati.” *Dioscor.*
l. iv. c. 171. p. 311. This therefore differs from our Scammonia; but is
 probably only a variety, of which *T.* makes mention: see his *Voy. Let.* 10.
p. 159. and *Geoff.* ii. 667. I shall only add, that the quantity of rosin in
 Scammony sufficiently proves it to be the proper juice, not that got by ex-
 pression from the plant.

Scammonium vocatur à *σκαμμα* fossa, à *σκαππω* fodio.—Scammony is good
 four years, according to *Dod.* but *Mesue* says it keeps good twenty years;
 others say forty. This juice was much used by Hippocrates; as was some-
 times also the root of the plant.

S E C T. II.

Scammony is a strong and efficacious purgative, agreeing much with jalap,
 or rather resina jalapæ; called a phlegmagogue and cholagogue; and much
 used in the stronger cathartic compositions, though not so much alone.

“ Expurgat valide humores biliosos acres, serosos, adeoque creberrimi usus
 “ est non modo per se, sed & cum aliis permistum. N. Cum magnæ sit acri-
 “ moniæ, intensæque caliditatis & siccitatis, insensæ malignitatis, mordacis
 “ flatulentia, excessivæ attractionis, adeoque aptum natum quod intestina ero-
 “ dat, viscera cor, hepar, &c. conturbet, ventriculum flatibus mordacibus
 “ laceßat. Vi sua calfactoria ac exiccatoria (quas 3. gr. obtinet) inflammet,
 “ & consequenter febres producat. Vi attractoria hypercatharises introducat
 “ Correctione opus habet: hanc alii aliter instituunt. Hinc *Prepar.* 1. Scam.
 “ correctum per cydonium, *i. e.* diagridium. 2. Scam. defœcatum per suc-
 “ cum citoniorum. 3. Extractum per sp. vini magisterium seu resina. Dosis
 “ a ʒß. ad gr. xv. 4. Extract. diagridii aromaticum. 5. Extractum Scam-
 “ mon. glycyrrhizatum. 6. Elyxir Scam. Crollianum. 7. Scam. vitriolatum.
 “ 8. Scam. sulphuratum. 9. Scam. rosatum. 10. Infusum Scammonii.
 “ 11. Diacydonium lucidum Scammoniatum. 12. Gelatina cydoniorum laxa-
 “ tiva, &c.” *Schrod.* p. 785—788.

1. It appears almost insipid at first, but then subacid, or rather penetrating,
 affecting more the root than tip of the tongue, and provoking the saliva plen-
 tifully; and smells somewhat strong and disagreeably: yet it is far from being
 so acrid as some make it. “ Est odore nauseoso, sapore amaricante, & medio-
 “ criter acri.” *J. B.* “ Gustu quidem nulla in eo caloris vehementia depre-
 “ henditur. Cuicunque siquidem liquori aut rei permisceatur, nullam ei vel
 “ amaritudinem, vel acrimoniam, aut alium ingratum saporem communicat;
 “ quamobrem nec inter calidissima, ut plerisque videtur, sed inter moderatius
 “ calida & sicca habendum.” *Dod. (accurate).* “ Saporis acris, nauseosi; odo-
 “ ris virosi.” *Herm. Cyn.* p. 686. “ Saporis est subamari, & nauseosi acris;
 “ non tamen mordacis; odoris virosi.” *Nucl. Belg.* 261. “ Of a pretty strong
 “ smell, but of no very hot taste.” *Mill. Bot.* 401. “ Saporis amaricantis,
 “ cum quadam acrimonia, & odoris virulenti.” *Geoff.* ii. 666. — 2. It is the
 produce of a species convolvuli; as also are jalapa, mechoacana, turbith, sol-
 danella; “ Smilax lævis. off. Convolvulus major albus, *B. P.* 294. . . Hoff-
 “ manno

“ manno Scammonium Germanicum appellatur. Helxine cissampelos, *effic.*
 “ Convolvulus minor arvensis.” *B. P.* 294. &c. which are purgative. Vide
Dale 183. The virtues of all these cathartics are lodged in their milky juice,
 or the therein contained rosin; of which the Scammony containing the far
 greatest proportion, it must needs be the strongest, being the succus proprius;
 whereas the rest are the intire substance of the roots, or herbs. Hence—3.
 Scammonii ʒj. contains at least resinæ ʒvj. mucilaginis vel gummi ʒj. vel ʒiij.
 & fœcum ʒj. vel ʒß. according to *Bolduc, Mem. Acad.* 1702. vid. p. 248, &c.
 “ I got ʒiij. of rosin from ʒiv. of Scammonii by means of sp. vini rectific.
 “ An extract made with residuum was more diuretic than purgative. From
 “ Scam. ʒiv. with acetum destillatum, I got extracti ʒij. ʒij. and from the
 “ residuum with sp. vini, resinæ ʒj. ʒij. The extract purges gently, given
 “ to gr. xij. or xv.” Thus *Bold.* l. c. “ Ex Scammonii ʒvj. resinæ ʒv.
 “ ope sp. vini extrahuntur. Verum tota ejus substantia aqueis menstruis sol-
 “ vitur; sed lacteo colore tingitur solutio, ob resinosas partes salinis & aqueis
 “ intermixtas.” *Geoff.* ii. 669. “ Sed resina minus purgat, quam Scammo-
 “ nium eadem dosi exhibitum, attamen intestina vehementius irritat, & sæpe
 “ inflammat.” *Ibid.* p. 675. Scammony turning into milk in water shews it
 contains somewhat of a menstruum for its own rosin, and consequently it
 easier dissolves in the stomach than the pure rosin will. Hence it more cer-
 tainly purges than its rosin; but I cannot say it purges more than the rosin in
 stomachs that can dissolve it. “ Rectified spirit dissolves ʒv. out of six (of
 “ Scammony); the remainder is a mucilaginous substance mixed with drols:
 “ proof spirit totally dissolves it, the impurities only being left.” *New Disp.*
 p. 202. “ The chymical analysis teaches only that the principles of Scam-
 “ mony are not easily separated, and that it contains little acid spirit, a little
 “ urinous, but much more of oily parts, and a little fixed salt.” *Bolduc,* l. c.
 “ Analyti chymica Scammonium fundit nonnihil liquoris acris, tenuis, qui
 “ primus in distillatione elevatur, nec acidi, nec alcali notas præbet: deinde
 “ liquoris acidi portionem non mediocrem; humoris tum acidi, tum urinosi
 “ aliquantulum; tandem multum olei crassi & empyreumatici, modicum terræ
 “ & salis fixi. Ex his exsurgit compositum gummosum & resinosum.” *Geoff.*
 ii. 669. Did either of these authors analyse it? — 4. The ancients commend
 it outwardly for hard tumors, itch, scurf, fixed pains, &c. and inwardly gave
 it in large doses as a purgative. *Dioscorides* takes no notice of its bad qualities:
 but if we depend upon what *Oribasius*, (*Collect.* l. 7. p. 328. E.) *Aetius*, (*Serm.* 3.
 c. 25. p. 124.) *Mesue*, (*Simpl.* l. 2. c. i. fol. 47. B. &c.) and other Arabians
 say of its noxæ, we shall never use it. “ Ego nunquam in praxi mea in usu
 “ habui, nec in posterum habebō; me semper ab istiusmodi venenis colliqua-
 “ tivis abstinens.” *Hoffm. in Schröd.* p. 573. Others commend it out of mea-
 sure. It certainly is, as *Boerb. Lib. de M. M.* has it, purgans forte, nec
 (multum irritans, vixque I add) inflammans, p. 82. I reckon it milder than
 the resina jalapæ. *Mr. Geoffrey* has near fourteen pages on Scammony. Sed
 nihil explicat. In a word, it is milder; and so safer than resina jalapæ. The
 ancients used the radix, as well as the juice, and in some cases it would do
 better. “ Scammonium etiam si inter cholagoga sit relatum, tamen usus
 “ comprobavit esse catholicum, polychrestum, & in omnibus morbis condu-
 “ cere, ubi purgatione opus est.” *Herm. Cyn.* 686.

S E C T. III.

It may be given intire to ℥j; its rosin to gr. xv. But Scam. gr. xvj. & resina ejus gr. xij. is generally a sufficient dose for any man. It needs no corrector if sufficiently divided, and rightly dosed.—It is an ingredient in the pulvis Varvicensis, vulgò Cornachini, pulvis diasennæ, pilulæ cocciaë, P. de duobus, P. ecphraticæ, & P. rudii. The *Pb. Lond.* has a pulvis e Scammonio compositus, pulvis e sena compositus, electarium e Scammonio, extractum catharticum, pilulæ ex colocynthide simpliciores, & P. ex coloc. cum aloë; in which it is used.

“Succus ʒj. aut ob. iv. pondere haustus, ex aqua aut mulsa, bilem pituitamque *ἀνω* purgat. Solvendæ alvi gratia ob. ij. cum sesamo aliove semine, sumpsisse sat est. Efficacioris etiam purgationis causâ dantur succi ob. iij. cum hellebori nigri ob. ij, & aloes ʒj.” *Dioscor.* l. 4. c. 171. p. 312. “*Plin.* l. 26. c. 8. dat ob. iv. ut & Paulus Aëtius & Actuarius ℥ij. exhibent.” *Hoffman*, p. 70. § 21. “Datur per se a gr. v. ad xij.” *Mesue.* l. c. “*Mesue* dat a gr. v. ad xv. *Bod.* a Stapel ad gr. xxv. *Videlius* ad ℥j. Ego vero a gr. ij. vel iij. ad gr. x. vel xij. ad summum Scammonium electum exhibeo.” *Geoff.* ii. 672. “Dosis gr. vj. xij. ℥j.” *Pb. Bat.* “Dosis Scammonii ad gr. vj. *Heurn.* ad gr. x. *Fernel.* gr. viii. *Curt.* gr. xij. *Rondel.* gr. xv. *Sennert.* ad gr. xvj. *Fulgin.* ad ℥j. *Morello.*” *S. Paul.* p. 604. “Datur in substantia & extracto a ℥ß. ad gr. xv. robustissimis ad ℥j. Resina a gr. vij. ad xv. in vitello ovi.” *Herm. Cyn.* 686.

Pulvis *Cornachini*, rather pulvis *Varvicensis*, was communicated to *Marcus Cornachinus*, P. M. at *Pisa*, by *Robert Dudley*, earl of *Warwick*: and he, being convinced of its wonderful effects, by the cures it performed on the said earl, his countess, and children, &c. in very frequent diseases, notwithstanding his former prejudices, wrote a book, called “*Methodus qua omnes humani corporis affectiones, ab humoribus copia aut qualitate peccantibus, genitæ, tuto, cito, & jucunde (chymice & Galenice) curantur*,” addressed to the said earl, to whom, as he owns, he owed the medicine an. 1620. It was several times printed: I have it annexed to *Jo. Hartmanni Praxis chymiatrica*, *Genevæ* 1682, in 8vo. The proportions were Scammonii p. iv, antimonii p. iij, tartari p. ij; but variable according to circumstances. It is now commonly prepared with equal parts of each: only the *Pb. Lond.* makes it of Scam. p. iv. and C.C.C. ppt. p. iii. Vid. *Antimon. Diapher.* supra, vol. i. p. 313.

L E C T U R E LXXVII.

SUCCI DENSATI.

ELATERIUM. Vide p. 421. vol. I.

M A N N A.

S E C T. I.

Manna, Manna Calabrina, *offic.* Manna officinarum, *B. P.* 497. Manna Calabrina, *Park.* 1591. Manna Calabrina fraxini & orni. *J. B.* i. 2, 192. Manna

Manna vulgaris officinarum, *R. H.* 1703. Common or Calabrian Manna—is the concrete juice of a tree, not very hard, of a whitish colour, or pale yellow; of a sweet but somewhat nauseous taste, and soft honey smell. It is said to flow spontaneously, and also from incisions made in the

Fraxinus rotundiore folio, *B. P.* 416. *J. B.* i. 2, 177. *T.* 577. *R. H.* 1703. *Fraxinus Alepensis*. *H. L.* 261. *Manifera arbor*, *offic.* The round-leaved ash, *Dale* 332. The Manna-ash *vulgo*. It grows in Italy, Sicily, &c. “*Fraxino* “*excelliori minor & humilior est, foliisque rotundioribus.* Transmisit D. “*Watfius ex Anglia.*” *H. L.*—as also from the

Fraxinus humilior sive altera Theophrasti, *minore & tenuiore folio*, *B. P.* 416. *T.* 577. *Fraxinus tenuiori & minore folio*, *J. B.* i. 2, 177. *R. H.* 1703. *Ornus*, *Lugd.* 83. *Ornus vulgaris fructifera*, *Pont. Anth.* 300. *Fraxinus floribus completis Hermaphroditus*, *H. Cliff.* 470. Cui, *F. floribus completis* mas est *Fraxinus florifera*, *botryoides*, *H. Blef.* 265. *T.* 577. *R. H.* 1704. *Ornus vulgaris sterilis*, *Pont. Anth.* 300. This *Mr. Rey* (and so *Mr. Geoff.*) takes to be a variety of the common ash: but they differ specifically even in *Linnaeus*’s opinion.

“*Notandum insuper colligi Mannam omnem quidem ex Fraxino & Orno;* “*sed non ex omnibus individuis; unde in Calabria venduntur tales arbores* “*quæ Mannam dant, ut scribit Altomarus. . . Si quæretur cur Fraxinus in* “*Calabria Mannam fundat, in aliis regionibus non item? quæram & ego,* “*Cur lentiscus in Chio insula mastichen manet, in Italia, &c. minimè? Re-* “*spondeo autem, id evenire, vel ratione temperie cœli, vel conditionis soli,* “*vel utriusque, vel forte etiam peculiaris naturæ & constitutionis ipsarum* “*arborum.*” *R. H.* 1704.

From the leaves and branches, especially in those parts to which the foot-stalks of the leaves adhered, in the summer months, the Manna sweats out, and by the sun’s heat thickens and dries into grains. It is collected in Calabria about or a little before the dog-days, in the heat of the day. It is got also by wounding the trees. “*Est autem Manna duplex quæ e Fraxino col-* “*ligitur: 1. Spontanea, eaque duplex, vel corporis, ut vocant; vel folii.* “*2. Coacta, quam Sforzatellam vocant Calabri.*” *Vid. R. H.* p. 1703.

That Manna is the juice issuing from the tree itself, and no celestial or honey dew, as was believed, the monks *Angelus Palea* and *Bartholomæus ab urbe veteri*, in their opera in antidotarium Mesuæ, Venetiis 1543. in folio, sufficiently proved: and many experiments have confirmed their opinion; as may be seen in *Donatus Antonius Altomarus* his treatise *De Mannæ differentiis ac viribus; deque eas dignoscendi via ac ratione*; as published in his *opera omnia*, *Lugduni* 1565. in folio, and afterwards several times reprinted: in *J. B.* i. ii. p. 180. ad p. 200: and briefly in *R. H.* 1703. And since now every one believes it, it is needless to repeat the arguments for, or answer the objections against, it; which you have in *J. B.* at large. On which account also *Mr. Geoffroy* might have spared more than half of the twenty pages he has on this simple, and whatever else bore the name.

Although several sorts of honey-dews, as they were believed to be, were observed by the ancients, (*vid. Bod. in Theoph.* p. 149.) which no doubt were exudations of plants; yet, according to *Friend*, (*Hist.* i. 271.) *Actuarius* is the first of the Greeks who mentions our Manna. He had it probably
from

from the Arabians; at least long before they knew the Manna of the Alhagi Maurorum Rauwolfii. (*T. Cor.* 54.) called Trungibin, & Tereniabin; though he was mistaken as to its original. See *T. Voy.* i. p. 123.—Was the Eleomeli *Dioscoridis*, l. i. c. 37. a sort of Manna? Is much of the Manna of the shops factitious, and made of honey, or sugar, with the addition of Scammony, or some other cathartic? For this *Mr. Hepburn* assures me he has the authority of a London apothecary.

“ Probatur Manna candida vel flavescens, levis, in granula, vel stirias cavas concreta, sapore dulci nec injucundo, minus sordida. Pinguis & mellea, perperam a nonnullis anteponitur, quandoquidem sæpius depravata est. . . . Sæpe etiam nihil aliud est, quam saccharum crassum cum melle, & tantillo Scammonii compactum, unde vehementer aliquando purgat. Rejiciuntur quoque massæ quædam candidæ, opacæ tamen, solidæ, graves, non stiriatæ, quæ nihil aliud sunt quam saccharum & Manna simul, cocta ad electuarii solidi consistentiam. Sed facile distinguitur densitate, gravitate, candore opaco, & gustu à Mannæ sapore prorsus diverso.” *Geoff.* ii. 591.

S E C T. II.

It is diluent, antacid, and purgative; called a cholagogue; and commended in coughs, hoarseness, asthma, heat of urine, and wherever mild cathartics are wanted; being safe for children, as well as pregnant women.

“ Temperata est ad caliditatem inclinans, guttur, asperam arteriam, thoracemque leniens, alvum blandè movens, bilem serosamque humores educens. Dosis infantibus a ʒij. ad ʒß: adultis ab ʒiß. ad ʒiijß. & ʒiij. N. Quia facile bilescit, in febribus, nisi frigida admista fuerit, non adeo conveniens censetur. *Præp.* 1. Electuarium diacassia cum Manna. 2. Elect. lenitivum cum Manna. 3. Manna tartarisata seu tabulæ de Manna. 4. Manna liquida. 5. Spiritus Mannæ. 6. Sp. Man. alius. 7. Syrupus de Manna laxativus.” *Schrod.* 783.

1. It is a soft, sweet substance, somewhat nauseous, no ways acrid nor malignant, and produced by a remarkably diuretic tree. Vid. *Fraxinus*. “ Sapor optime suavis, cum dulcedine modice linguam mordens; quæ nim. morfu caret evanida est, & quæ nauseosa impura, aut adulterata aut sennæ infusione, aut addito Scammonio.” *J. B.* i. 2, 197. “ Saporis est subacris, subdulcis, pinguis & nauseosus; odoris nullius, vel melliti.” *Herm. Cyn.* p. 697. “ Saporis est subdulcis pinguis.” *Dale* 332. “ Saporis est dulcis mellis ad instar, odoris fatui.” *Nucl. Belg.* 185. “ Sapore grato sacchari, cum aliqua acredine. . . Sapore dulci nec injucundo.” *Geoff.* ii. 591. — 2. It easily and intirely dissolves in water, contains little oil, and comes nearer to sugar than to any gum or rosin: or is more saline than gummy or sulphureous. — 3. Chemically analysed, Mannæ ʒxvj. gave of insipid phlegm, smelling of the simple, ʒj: of empyreumatic spirit, of an acrid and penetrating acid taste, ʒxj. ʒij; of black foetid oil ʒv; leaving an insipid carbo weighing ʒij, ʒij, whence a little fixed salt was got: and the ashes contained particles which a magnetic knife attracted. Vid. *Lem. Chym.* p. 727; who hence infers that Manna contains less earth than honey. For mellis lbj. analysed the same way,

left carbonis ℥ij . ʒv . *Ib.* p. 728. But it might contain more fixed oil, and leſs earth. According to his analyſis the jaſtura was ʒvj . But, according to *Geoffroy*, “Analyſi chymica Mannæ electæ ℔ij præbuerunt phlegmatis inſipidi ℥ij . ʒvj . gr. xlvij ; ſpiritus tum acidi tum aliquantiſper urinoſi ℥x . ʒvj ; olei ℥iv ß; carbonis ℥vj . ʒv . gr. xij , unde cinerum ʒvj . gr. vj , ac inde ſalis alcali fixi ℥ij . (è terræ ʒiv . gr. vj .) & jaſtura fuit ℥vij . ʒij . gr. xij . (M. M. ii. 594.) Itaque (adds he) Manna conſtat ſale eſſentiali, ſeu tartaro copioſo, & exigua portione ſalis ammoniaci, multo ſulphure, tum tenui tum craſſo, involutis.” How vaſtly different from *Lemery’s*! And—4. As it is extravagantly commended by *Altemarus*, ſo its being hurtful in fevers on account of its bileſcency, as they ſpeak, or in hypochondriac, melancholic, or ſcorbutic diſeaſes, as eaſily fermenting, is merely imaginary, & inanis metus: and *Hoffman’s* cautelæ (p. 40. § 20.) uſeleſs. “Cautelæ in ejus uſu duæ ſunt. Altera ne detur cruda ſed cocta: habet enim, non minus quam caſſia ſtatuofum quid. Altera ut detur cum acribus, thymo, hyſſopo, ut actio ſit celerior.” But this addition is prejudicial; rather hindering than forwarding its operation.

S E C T. III.

It has been given to ℥iv : but ℥ij . I think enough. If this quantity does not answer, it may be quickened with ſenna, or rhubarb, and ſometimes with tart. emet. gr. i. aut altera, or vini emetici ℥ij . or iv. It needs only be diſſolved in any aqueous fluid; and put through a cloth, to ſeparate any adhering impurities. It is uſed in the elect. diacaſſia and lohoch de Manna.

“Si ſtimulo egeat, ſenna aut rhabarbarum ei admiſceatur: potentius adhuc acuitur, & efficacius tartari ſtibiati granis aliquot, in plures doſes diſtributis, uno pro ſingulo doſi. Sic abſque ulla moleſtia, naulea, vomitione, aut torminibus, copioſa ſeri bilioſi evacuatio promovebitur. . . & Mannæ Calab. ℥ij , tartari ſtib. gr. v. Diſſolve in aquæ puræ ℔ij . Fiat colatura per cyathos propinanda.” *Geoff.* ii. 597. Vide *Antimonium*, vol. i. 292.

S A C C H A R U M.

S E C T. I.

Saccharum, offic. Sugar—is the eſſential ſalt of a reed; of a brown, gray, or white colour; of a ſubviſcid, pleaſant, ſweet taſte, and ſoft ſmell; brought from America. The plant is called

Arundo Saccharifera, *B. P.* 18. *Theat.* 293. *H. Ox.* iii. 220. *Sloan. Cat.* 31. *Hiſt.* i. 108. *Arundo Saccharina*, *J. B.* ii. 531. *Ger.* 38. *R. H.* 1278. *Dale* 266. *Harundo Saccharifera*, *Park.* 1210. *Arundo Saccharina*, *Calamus Saccharinus*, *Tab. Ic.* 257. *Tacomarée*, *Piſo* 108. *Saccharum*, *H. Cliff.* 26. The Sugar-Cane or Reed.

It grows in both the Indies, &c. “Crefcit in utraque India; ut in Madera, Hiſpaniola, Braſilia, Sumatra, Arabia Felic. &c. inque locis campeſtribus, inundatis per hyemem, juxtaque ripas,” *H. Cliff.* 26; and increaſes faſt by its creeping roots.

When these reeds come to a proper maturity they are cut down, stript of their leaves and tops, and their juice pressed out by making them pass betwixt very close large vertical rollers or cylinders, armed with iron. Tho' this juice is very sweet, yet it will not keep twenty-fours without turning sour; so that it is conveyed very soon into a large copper, where it is kept hot, and bubbling, but not suffered to boil by the continual addition of fresh cold juice. From this vessel, being well skimmed, it is conveyed into a boiler, where it is again skimmed very carefully. Hence it passes through several other boilers, four or five gradually smaller, being well stirred, skimmed, and clarified, by means of a strong lye: and in the last boiler, called the tack, it is brought to a due consistence (a small quantity of sweet oil being added to stop its boiling or rising). It is then emptied into a cooler, and thence into inverted conical earthen pots, where it soon hardens into sugar. When it is hardened, they cover it with clay, take out the stopper that was in the small and undermost end of the pots, and leave them in frames for four months to drop the melasses, which is afterwards fermented and distilled into rum. The sugar, having thus purified itself from the melasses, is beaten out of the pots; the coarser tops and bottoms, about a third of the whole, are separated; and the finer middle part casked up for sale. They say, if no clay be used, the melasses is separated in one month's time; but the sugar is coarser, and called common muscavado sugar; but when covered with clay, the tops and bottoms only are muscavado, and the middle part white or lump sugar. Of this sugar, by refining, &c. are made the cassionade, loaf sugar, coarse, and fine or refined; brown and white sugar-candy, &c. which seem to differ principally, if not only, in the proportion which the oily and mucilaginous parts bear to those that are more purely saline. And hence *Mr. Lemery, Pharm.* 114, observes, that syrups made with the coarse sugars do not so soon candy as when they are made with the finer loaf sugars. Vid. etiam *Narrat. in Pemb. Dispens.* p. 92. The whole process of the sugar making is related by many; as by *Richard Ligon*, in his *History of Barbadoes*, London 1657. in fol. by *G. Piso*, *Marcgrave*, *Hernandez*, *Hughs*, *J. B. R. H.* &c. And, circumstantially enough, by *Savary*, *Diét.* vol. ii. col. 1634. to 1650. where also you have the manner of refining and candying it, and the different sorts of it commonly used. I shall only add further, that it is refined at home by dissolving it in lime-water, clarifying it with whites of eggs, boiling to a due consistence; and putting it into earthen pots, where it granulates, and more melasses drop from it. This is the single refined; which being dissolved in simple water, and undergoing the process as above, is the double refined, or the finest loaf sugar. "The process for sugar-candy differs from the former only in not boiling the liquor so thick, and setting it in a hot stove, where it may remain liquid enough, that the sugar may crystallize, in the same manner as salts do in water." *Narrat. Pemb. Disp.* p. 94.

Sugar-candy is called *Saccharum candum*, *candium*, *lucidum*, *crystallinum*; or *canti vel cantium*, in authors. "A candore non habet nomen, nec ab insula Creta, *καντι*, vel *καντιον*, ut apud Myrepsum legitur: Græci Barbari vocarunt, quod angulosum sit, & cum frangitur, in partes semper diffiliat angulatas, id Græci recentiores *καντον* & *κατε νοτον*, vocant." *Bod. in Theoph.* p. 484.

"Est

“ Est quoddam mellis concreti genus quod *σακχαρον* nominatur, quodque
 “ in India & Arabia Felici in arundinibus reperitur, consistentia sali simile; ac
 “ dentibus etiam salis modo fragile. Est illud alvū idoneum, & stomacho
 “ utile: si aqua dilutum bibatur: vexatæ vero vesicæ renibusque auxiliatur:
 “ quin & illitum ea discutit quæ pupillis tenebras offundunt.” *Dioscor.* l. 2.
 c. 104. “ Saccaron Arabia fert, sed laudatius India. Est autem mel in
 “ harundinibus collectum, gummium modo candidum, dentibus fragile, am-
 “ plissimum nucis avellano magnitudine, ad medicinæ tantum usum.” *Plin.*
 l. 12. c. 8. p. 304. “ Sed & *σακχαρ*, ut vocant, quod ex India & Felici
 “ Arabia convehitur, concrefcit quidem, ut aiunt, circa calamos, & ipsum
 “ mellis est species, minus certe nostrate dulcis, sed adsimiles ei vires obtinens,
 “ quod ad abstergendum, desiccandum, & digerendum attinet. Porro qua-
 “ tenus nec inimicum stomacho est, ceu nostras, nec sitim afferens, eatenus
 “ ab illo substantia differt.” *Galen Simpl.* l. 7. fol. 55. E. “ Cæterum Sac-
 “ charum, quod ac Felici Arabia affertur, minus dulce est eo quod apud nos
 “ est, sed equalem vim habet, ad hoc quod neque stomacho noxium est, ne-
 “ que sitim inducit velut hoc (viz. mel.) nostrum.” *Paul.* l. 7. col. 632. F;
 abridging only thus Galen, though the index makes him distinguish between
 the Grecian and Arabian Saccharum, thus: “ Sacchari Arabici & Græci
 “ differentia & vires, 632. f. Aeg.” In a fragment of *Theophrastus*, *De Melle*,
 mention is made of one sort *ἐν τοῖς καλάμοις*, in arundinibus. (Ed. Heinsii,
 p. 475.) But the Saccharum of the ancients seems to have been got from a
 different plant, and to be the Saccar Mambu. Vid. *Garcias in Clus. Exot.* 165.
 & *Bod. in Theoph.* p. 481—483. “ Arundo (Indica) arbor: in qua humor
 “ lacteus gignitur qui Tabaxir Avicen. & Arabibus dicitur. Mambu Indo-
 “ rum, in cujus arundinibus Tabaxir sive Saccar Mambu, Garziæ.” *B. P.* 18.
 Vid. *Clus. Exot.* 18. *R. H.* 1315. Saccharum nomen habet à Sacar.

“ Saccharum, offic. *σακχαρον*, *Dioscoridis*: *σακχαρ*, Galeni: *μελι ἐν καλά-*
 “ *μοις*, Theophrasti: *μελι καλάμινον*, Arriani: *ἀλς ἰνδίκος*, Pauli Æginetæ:
 “ Zuccar, *Arabum*: Saccharon, *Plinii*: Est sal essentialis, pinguis, oleagino-
 “ fus. . . . Ex arundine saccharifera extractus.” *Geoff.* ii. 732. According to
 him the juice passes but three boilers; is despumated in the first; skimmed,
 boiled down, and mixed with a strong lye, in the second; then strained per
 pannos, and brought to a due consistence in the third: p. 738.

S E C T. II.

Sugar is diluent, detergent, emollient, and antacid; called pectoral, sto-
 machic, diuretic, and laxative; and commended in coughs, hoarseness, asth-
 ma, consumption, &c. agreeing in many things with liquorice: but it is more
 used for its taste than virtues.

Schroder does not give its virtues, but in a note says, “ Refinatum, quia
 “ aliquantulum acrius est, præstat in attenuatione, incisione, abstersione: non
 “ refinatum in lenitione, lævigatione, adeoque in pulmonum vitiis, &c.”
 “ *Præp.* 1. Saccharum penidium. 2. Sacch. rosatum. 3. Sacch. violatum.
 “ 4. Aqua seu spiritus acidulus . . . est instar sp. guajaci. 5. Oleum. 6. Sal.
 “ 7. Liquor seu syrupus. 8. Liquor alius. 9. Essentia & crystalli Sacchari.”

Schrod. p. 739. And *Dale*, p. 266. says (from *R. H.*) "It would require a volume to give its virtues and use in food and medicine, with its numerous preparations."

"Tam alimentum quam medicamentum est, temperans & obtundens quævis acida; resolvens quævis rigida & aspera. Promovere urinam experientia docuit; specificum est in tussi, raucedine, asperitate, aliisque pulmonum vitiis. Melancholicis, hypochondriacis, hysteris, febricitantibus, &c. ob facilem sui acescentiam sacchari largior usus non convenit. Externè vulnerarium & ophthalmicum est." *Herm. Cyn.* p. 704.

"In corpore humano latice naturali dilutum, lixivium præbet saponaceum, quod oleosa, viscosa, vi vitæ adjuvante, dissolvit; hinc pituitam nunquam generat, sed dissolvit. Nec bilem auget, aut in illam convertitur, sed aperit, attenuat, dividit. Interim tamen olea nimis solvendo, macilentiam inducere potest. Ut & attenuatione nimia, debilitatem producit, & laxitatem nimiam. Quare & rachiticis, scorbuticisque sæpe nocuisse visum." *Boerb. Chem.* ii. p. 160.

1. It is subviscid, very sweet, and more universally agreeable to the taste than any substance I know, without any acrimony. "Constat mucagine temperata dulci, cum blanda acredine." *Herm.* l. c. "Sapore est dulci grato; odore fere nullo." *Geoff.* ii. 732. — 2. It dissolves intirely in water; crystallises; renders oils permiscible with aqueous fluids; melts in the fire, and flames; is easily fermented into wine, whence alcohol may be distilled; or into as good vinegar as any wine can afford. "An est sal? qui ergo inflammatur igne? . . . An oleum? quomodo igitur crystallisatur? . . . An sal essentialis? unde igitur fermentatur? Eat per totam naturam, querite! haud crediderim, ullum corpus repertum iri in quo hæc simul concurrunt." *Boerb. Chem.* ii. 160 — 3. Yet by a chemical analysis it yields but little oil, and a considerable quantity of acid spirit. "Sacchari candi ℥viij. & salis ammoniaci ℥iv. distilled with a sand heat, gave of clear agreeably acid spirit ℥iij. 3j, without empyreuma; and of a foetid brown oily liquor about 5vj. (from which by rectification scarce olei puri 3j. was got) & carbonis 3vij. 3vj. (so that only 3ij. were lost). The spirit drawn without sal ammoniac is not so strong as that with it." *Vid. Lem. Chym.* p. 662. "Analyti chymica ex Sacchari albissimi lbij. prodierunt phlegmatis insipidi 3j. 5ß; liquoris primo limpidi, deindè rufescentis empyreumatici, tum acidi tum urinosi 3xij. 5vj, (i. e. humorum 3xij. 5viß;) olei 3ij. 5j. gr. xlv. Carbo pen-debat 3viij. 5j. gr. lxij; unde cinerum 3ix. gr. x. ac inde salis fixi alcali 5ij. gr. lx. (ergo terræ 5vj. gr. xxij.) & jactura fuit 3viij. 5vj. (but here the sum is lbij. + 3j. 3vij. gr. lxxi, that is two ounces within one grain too much). Saccharum est sal essentialis, constans ex acido sale, oleo & terra. Concrefcit in crystallos prismaticas, ex octo superficiebus planis constantes, quarum duæ bases oppositæ æquales sunt & parallelæ, cæteræ sunt parallelogrammata. Nullas aut acidi, aut alcali notas præbet: flammam concipit & luculenter ardet: aqueis menstruis facillimè solvitur, ægrè spirituosus & oleosis: aqua dilutum fermentationem subit, & vinosum saporem primum acquirit, postea acetosum. Si Sacchari lbj. in aquæ lbvj. vel viij. soluta, & recentis fermenti cerevisiarii cochleare unum accurate misceantur, & lento calori exponantur, in vase idoneo clauso, sed non omnino repleto, paucis
"horis

“ horis fermentescere incipiet magna cum vehementia, & post tres quatuorve
 “ septimanas, plus minusve pro quantitate liquoris & loci tepore, fortissimum
 “ liquorem præbet vinosum, hydromeli non absimilem. Ex eo distillato for-
 “ tissimus spiritus ardens extrahitur. Si vero tota fermentans materia conti-
 “ nuo calori diutius exponatur, intra breve temporis spatium, in fortissimum
 “ acetum mutabitur, aceto vini prorsus simile.” *Geoff. ii. 744, 745.* Here,
 to make vinegar, we put one part of loaf sugar into a barrel, and pour on it
 eight parts of boiling water; setting it in a place moderately warm, as not
 very far from the kitchen fire, for a night; and next morning, when it is
 sufficiently cooled, put into it a slice of a wheaten loaf which has imbibed two
 or three spoonfuls of fresh yeast. It soon begins to ferment, foams a little,
 and makes a hissing noise; but neither rises, like malt liquors, nor boils like
 wine. This fermentation continues two or three weeks, as is known by its
 noise; during which time the bung is only lightly covered: after the ferment-
 ation is over, the bung is stopped up as close as can be; and the vessel remains
 in the same place for eight months more: when the liquor is commonly turned
 into good vinegar, not inferior to any that comes from France, on any account
 whatsoever; and much preferable to what is sold commonly for good white-
 wine vinegar. It may be made of melasses, or coarse sugar, but then the co-
 lour is not so fine. But—4. The leaves, tops, and marc of the sugar-canes,
 and skimmings of the juice fatten cattle: and the flesh of hogs, thus fed, is
 said to be more delicate and tender than otherwise it would have been. “ Af-
 “ ferunt enim ex arundinibus contritis & jam expressis sues mirum in modum
 “ pinguescere, eorumque carnem adeo teneram & sapidam effici, ut caponis
 “ carni præferatur.” *Geoff. ii. 746.* Sugar tickles the nose, and they say pro-
 vokes sneezing, as it pains carious teeth. And—5. As it is evidently useful
 in all diseases accompanied with, or caused by, rigidity of the fibres; phlegma-
 tic, yea and inflammatory, viscidities of the juices; or bilious, rancid, or putrid
 acrimony; and consequently in coughs, consumptions, inflammatory, bilious,
 or putrid fevers, heat of urine, obstructions of the viscera, &c. so the lax,
 tender, delicate, ought not to be indulged a too liberal use of it; especially
 ricketty children: and such as are subject to the tooth-ach, or have carious
 teeth, would do well to rinse their mouth with cold water after taking it.

How pleasant soever sugar is, it wants not *bitter* enemies, who accuse it as a
 main cause of the scurvy and consumption in Britain; of worms in children,
 and vapours in women. Vide *Willis de Scorbuto, R. H. 1279.* &c. On the
 other hand *Dr. Fred. Stare*, in his *Vindication of Sugar*, annexed to his *Experi-
 ments on Bezoar, London 1715.* in 8vo, sufficiently acquits it of having any
 hand in the consumption and scurvy; not allowing it to hurt even so much
 as the teeth, from his own experience. He says the *duke of Beaufort*, who
 died of a fever when seventy years old, and who used to devour near a pound
 of sugar every day for almost forty years, had very firm teeth: and, when his
 body was opened, all his viscera were as sound as they are usually found in a
 person of twenty. He used to repeat the English proverb, “ *That which pre-
 “ serves apples and plums, will always preserve liver and lungs.*” The Dr. next
 gives an account of *Mr. Malory*, his grandfather, who all his life-time loved
 sugar, after eighty years had a new set of teeth, and died about 100 years old.
 of an apoplexy: and then tells us what good effects sugar had on himself, then,
 near

near sixty-seven years old, used externally as an errhine and dentrifice, as well as internally. *vide* p. 59—63. “Saccharo rosaceo se quosdam phthificos vidisse curatos testantur Montanus, Valeriola, Forestus, quo ægri in maxima quantitate utebantur. Riverius novit Pharmacopœum quendam phthificum, qui ingentem Sacchari rosacei quantitatem sibi ipse præparabat, idque perpetuò comedebat; & hoc solo remedio sanatus est, ut refert *cap. de phthifi*. “Observandum tamen est ex unanimi medicorum consensu biliosos, melancholicos, scorbuticos, nec non hystericas mulieres ab eo abstinere debere; facile enim fermentescit, & æstuantium aut fermentantium humorum effervescentiam & ardorem auget, eorumque morborum symptomata graviora efficit.” *Geoff.* ii. 751. (Compare this with what he has on the cassiæ pulpa.) That this is true ex unanimi medicorum consensu, I deny. And what he has quoted from Slare, a page or two before, sufficiently shews that he is wrong. He confounds fermentation with æstuantium humorum ardor. Will any one say, that all sorts of grain, sweet and acidulous fruits and herbs, &c. are hurtful in the scurvy, or increase the ardor humorum? That Sugar cannot answer in every scorbutic, &c. case, as when roborantia & acria stimulantia are indicated, I easily grant; but that it does little hurt in that disease is evident, since those most affected with it are such who make least use of it. *Vid. Slare.*

“Salinis Sacchari spiculis onusta bilis acrior evadit: unde æstum non solum in intestinis accendit, sed etiam per totum corpus, dum in massam sanguineam transvehitur. Infantibus vermes ingenerat.” *Geoff.* ii. 747. But this is not fact: for if ever Sugar do any prejudice, it is by diminishing, not increasing, the acrimony of the bile. And it is also a groundless opinion with some that bitters kill worm; but sweets, especially sugar and honey, breed and increase them. For Redi’s experiments evince, that a solution of honey or sugar much sooner kills worms (*viz.* in an hour or two’s time) than a strong infusion of wormwood or aloes (in which they lived twenty-fours. *Vide Redi’s Obs. circa animal.* p. 156, 159, 165, & 166.

I need not determine the dose; nor tell you in how many forms it is used. We have it in many tinctures, decoctions, syrups, gellies, confections, conserves, electuaries, lochs, troches, and yet much more frequently used at the table than in the shops.

“A hundred weight of good, clean, brown sugar, will afford eighty pints of proof spirit called brandy, as a rich distiller informed me. That very considerable quantities of spirits are gained, both out of clean melasses and good sugar, I know to be true by my own experiments.” *Slare Vind.* p. 52.

S U C C U S A C A C I Æ.

S E C T. I.

1. Acacia, Acacia vera, & Succus Acaciæ, *offic.* *Vide* gummi Arabicum *supra*, p. 382.

2. Acaciæ Germanica, *offic.* German Acacia—is an hard inspissated juice, of a blackish colour on the outside, reddish within, and of an astringent sourish taste, without smell: it is expressed from the fruit of the

Prunus

Prunus sylvestris, *B. P.* 444. *T.* 623. *Dod.* 753. *J. B.* i. 193. *Ger.* 1497. *Park.* 1033. *R. H.* 1527. *Syn.* 462. *Prunellus sylvestris offic.* *Dale* 305. *Prunus spinosa foliis lanceolatis*, *H. Cliff.* 186. The Black Thorn, or Sloe-tree;—which is very common in thickets, hedges, &c. almost every where, flowering in April. “*Acacia Germana non infrequens in officinis pro Acacia vera venditur.*” *Dale* 305.

S E C T. II.

It is used only as a succedaneum for the *Acacia vera*; being “put into all the great compositions,” says *Mill. Bot.* 360.

“*Acaciæ veræ succus hic cum rarus sit, substituitur ut plurimum Acacia Germanica. . . Pruni sylvestris folia, fructus, cortices, refrigerant, exiccant gr. 3. astringunt, incrassant. Usus præcipuus est in profluvio alvi, uteri. Extrinsecus in gargarismis, balneis uterinis. Flores resolvunt, renum sabulum educunt, compressiones cardiacas leniunt, pleuriticam radicem (nonne pleuriticum laticem?) resolvunt, alvum laxant. Præp. 1. Conserva florum. 2. Aqua stillat. & 3. Syrupus eorum. 4. Succus fructuum inspissatus. 5. Vinum: & 6. Fructus conditi.*” *Schrod.* 524.

The *New London M. M.* has expelled the *Acacia Germanica*, but retains the *pruni sylvestris fructus*, or *pruna sylvestria*; and makes a conserve of them. “*Fructus bene maturi alvum laxant; sed immaturi refrigerant & astringunt: quapropter melle conditi dysentericis & alvi profluvio laborantibus exhibentur. . . Ex iisdem immaturis & recentibus succus exprimitur, & inspissatur ad extracti solidi consistentiam, sub Acaciæ Germanicæ nomine, & Acaciæ veræ succedaneum habetur. Majori tamen aciditate donatur; quapropter magis refrigerans & astringens censetur. Ad ʒj. exhibetur, sub forma boli, &c.*” *Geoff.* ii. 719. The ripest Sloes that ever I tasted were very astringent and acid. The flowers and leaves are bitter and purgative.

S U C C U S H Y P O C I S T I D I S.

S E C T. I.

Hypocistis, *Succus Hypocistidis, offic.* is a solid inspissated juice of a black somewhat shining colour, and sowerish astringent taste, without scent. It is expressed from the

Hypocistis (sub cisto) *B. P.* 465. *Hypocistis, Dod.* 191. *Ger.* 1275. *Park.* 667. *J. B.* ii. 7. *Hypocistis purpurea, seu Carmesina, cythino candicante, Clus. Hist.* 69. *Hypocistis purpurea flore candicante. T. Cor.* p. 46. *Orobanche minor, e cisto nascens, H. Ox.* iii. 502. *Orobanche quæ Hypocistis dicitur, R. H.* 1228. *Hypocistis offic. Dale* 197. *Asari species Linnæo. G. Pl.* p. 207. *Hypocistis, or Rape of Cistus.*—This grows in Spain, Candy, &c. and on the roots we have the *Cistus*.

“*Ad Cysti maris primi radices copiosè nascitur elegantissima Hypocistis, novo vere, cum Cistus jam ad explicandos flores se parat: nam quando primum è terra emergit, purpureum sive Kermesinum fericum esse dices:*

“ deinde paulatim affurgens, & sese explicans, multum de pristini coloris elegantia remittit, & cytinus suos profert candicantes, turgidos & lento succo plenos: qui a peritis pharmacopœis densatur & in usum adservatur.”

Clus. II. 68; who, p. 72. mentions another, viz. *Hypocistis lutea*, growing on the root of the *Cistus folio thymi*, which he understood boys and shepherds eat: also a third sort, p. 79. growing on the root of the *Cistus Ledon quintus*. In *T. Cor.* p. 46. there is a fourth, viz. *Hypocistis Cretica flore purpureo*, which *Mr. Chamel* takes to be the species whence the juice is expressed. But *T.* reckons all the four rather varieties than different species: so that they are probably of the same nature.

“ *Hypocistidis* caulis saporis est amari & summè astringentis. . . *Flos mali punice cytino similis est.* . . . *Fructus succo turgidus lento, glutinoso, saporis fatui.* . . . *Ad succum præparandum cytinus seu fructus recentes contundunt, & succum eliciunt, qui subinde insolatur & densatur, ad extracti solidi consistentiam.*” Thus *Geoff. ii.* 720, not very consistently.

This is generally believed to be the *Hypocistis antiquorum*, and not without reason. Vide *Dioscor. l. i. c. 127.* p. 64. “ It comes to Marseilles from Candie and Languedoc, from three to four quintals annually, for medicine; worth ten to twelve sols per pound, and consumed almost all in England and Holland.” *Sav. Diet. iii.* 507.

S E C T. II.

It has the virtues of the *acacia Germanica*; but is little used except in the *mithridatium* & *theriaca*. The dose is to ʒj.

“ *Refrigerat* (3.) *siccatur*, potentissimè astringit, condensat. *Ufus præcip.* in quibuscunque fluxionibus sistendis, diarrhœa, lienteria, dysenteria, profluvio uteri, vomitu, &c. *Uti & excretionem sanguinis ex lapsu casuve orta.* *Extrinsecus roborat viscera humidiora, ventriculum, epas, &c.* *N. Quia rara est, ejus loco succus acaciæ recipi potest, quippe analogas vires habet, quamvis imbecilliores.* *Præp.* *Hypocistis depurata.*” *Schrod.* 722.

“ *Ex iisdem fere constat principiis, ex quibus acacia, & iisdem virtutibus donatur.* *Potenter astringit.* . . . *Intus sumitur a ʒß. ad ʒj.* *In gargar. repercutientibus usurpatur.*” *Geoff. ii.* 721.

S U C C U S J A P O N I C U S.

S E C T. I.

Terra Japonica, Catechu, offic. is a hard, brittle substance, of a dark brown colour, somewhat yellowish or clay-coloured on one side; of an earthy, astringent, and somewhat bitterish taste at first, then sweetish and pretty agreeable; without any smell; brought from the East-Indies.

“ *Est substantia compacta, sicca, friabilis, externe fusco-rubicundi vel nigricantis coloris: interne habet strata albicantia, cum lineis nigris interpositis; saporis est austeri, primo amaricantis, in recessu dulcis, & grati; humectat os; dissolvitur in aqua, & in spiritu vini,*” *Nucl. Belg.* p. 68.

“ Est

“ Est substantia resinosa & gummosa indurata, ex rufo nigrescentis obscuri
 “ & obsoleti coloris, expressa ex fructibus immaturis arecæ, & corticibus
 “ arboris Indicæ Catlchu, acaciæ speciei, & in massam calore ignis redacta.
 “ Saporis adstringentis & austeri, postmodum dulcis & grati; odoris vel nul-
 “ lius vel debilis. Et fructibus & corticibus seorsim affunditur aqua impreg-
 “ nata calce, quam Indi parant ex conchyliis, utuntur loco salis tartari, quo
 “ melius terrea virtus extrahatur, confundunt solutiones & inspissant.” *Herm.*
Cyn. 721.

Though we know little of the origin of this substance, or what it is, yet we are sure it is not an earth, and that it is pretty probable it comes not from Japan, otherwise Kempfer would have mentioned it. Dale, Lemery, Geoffroy, make two kinds of it: I know only one. “ There is but one sort
 “ of Cachore, though when broken it is found of different colours and qua-
 “ lities, which is owing to the faulty preparation.” *Bolduc. Mem. Acad.* 1709. p. 293. “ Non provenit in regno Japan; locus natalis est regnum Coroman-
 “ del.” *Albin. MS.* It is an extract prepared from the tree cate or cato, (Vide *Clus. Exot.* p. 163.) According to Garzias Herbertus de Jager makes it a juice got from several trees, of which the areca is one, Vid. *Ephem. Germ. Decur.* 2. *An.* 3. or *Geoff.* ii. 723—727. You have Wedelius’s opinion, and also that of Paulus Ammannus, and of Joan. Otho Helbigius in *Dale*, p. 270. And by Mr. Albert’s account of it, which Mr. Jussieu gives, *Mem. Acad.* 1720. p. 440. it is nothing but an extract of the areca: which opinion is adopted in our Pharmacopœia, N. B. Albert was several years surgeon-major at Pondicherry in Coromandel.

Areca, *offic.* Palma, cujus fructus sessilis Faufel dicitur, *B. P.* 510. Faufel sive Areca, Palmæ foliis, *J. B.* ii. 389. Areca sive Faufel. *Garz. Clus. Ex.* 188. *Ger.* 1520. Areca sive Faufel, sive Avellana Indica versicolor, *Park.* 1642. *R. H.* 1363. Palma arecifera nucleo versicolore, nuci moschatæ simili. *Par. Bat. prod.* 361. *Pluk. Phyt.* 309. *Alm.* 275. *Fl. Mal.* 197. Avellana Indica Acestæ, *Clus. Exot.* 268. Nux Faufel, seu Pynangh. *Bont.* 90. Caunga, *H. Mal.* i. 9. t. 5. 6. 7. 8. The drunken Date-tree, *Ger.* The Indian or Malabar Nut, *Dale*, p. 270.

On calcination it seems to leave a greater quantity of ashes than any expressed juice would do: for Terræ Japonicæ ʒij calcined left cinerum gr. xxxiii. that is more than a fourth part. *Iteretur experimentum.*

S E C T. II.

It is astringent, incrassating, and antiseptic; yea and antacid also; called pectoral and stomachic; and commended internally for fluxes, hæmorrhages, the lientery, incontinentia urinæ, dysentery, vomitings, diabetes, fluor albus; in coughs, hoarseness, catarrhs, &c. and externally for spongy gums, loose teeth, sore mouths, &c.

“ Catechu seu Terræ Japonicæ usum perhibent celebrem in exiccandis catar-
 “ rhis, capiteque roborando, si in ore detineatur.” *Schrod.* p. 518. “ Vi ad-
 “ strictoria insigni prædita est, & valet ad vomitus nimios, fluxus ventris, dia-
 “ betem, fluorem album, hæmorrhagias, præcipuè sputum sanguinis; ad rau-
 “ VOL. II. Q q q cedinem,

“cedinem, tussim, & alios affectus pectoris, & aliarum partium in quibus opus est adstrictione; in affectibus oris abstergendo & roborando optime prodest.” *Nucl. Belg.* 68.

1. Its taste is very compound, being not only austere, but also sweetish, subviscid, and agreeable: and it makes ink with vitriol. “Saporis est astringentis & austeri, postmodum dulcis & grati; odoris nullius.” *Dale* 270. “Saporis astringentis, subamari, postmodum dulcioris et grati, odoris expers.” *Geoff.* ii. 722. — 2. Water dissolves little more of it than spirit of wine does. (a) *Mr. Bolduc* dissolved of good Cachore ℥iv . in aquæ ℥xxiv , with a moderate heat. It appeared intirely dissolved, except a few coarse parts; but when cold it became a sort of mucilage of a flesh colour, like a fine bole dissolved in water: which made him dilute it with water with a gentle heat; and then filter it, and evaporate to the consistence of an extract as dry as the Cachori commonly is; by which means he had of extract ℥ij . ℥iij . The residuum weighed only ℥j . (so that ℥v . were lost) whence he got with rect. sp. vini extracti ℥v . of a less delicate and harsher taste, leaving no sweetness behind it. There remained after all ℥ij . of feculencies, which neither water nor spirit could dissolve. (β) He then dissolved in sp. vini rect. q. s, assisted by heat, ℥iv . of Cachore naturel also; which did not coagulate by cold, as that in water had done. And having filtered, drawn off the spirit, &c. he had of a very fine shining extract ℥ij . ℥vj . But it could not be dried like that with water: it was more unctuous, not so sweet on the tongue, but much more harsh, and very disagreeable. The residuum weighed ℥ix ; whence he had of a coarse extract with water ℥v , of little taste and disagreeable. He mentions not what remained after this second extraction. (γ) He calcined also in a crucible cachori ℥i . and had cinerum ℥iiss . which yielded some grains of a fixed alc. (δ) By a chemical analysis he got a little phlegm, an acid spirit, much thick oil, mixed with some drops of an urinous spirit. From ℥iv there remained of caput mortuum only ℥j . whence after calcination there were salis fixi gr. xij. He observes that the juices which compose the Cachou, or of which it is made, must be very viscous and mucilaginous: and that the simple itself is preferable to any preparation of it; the best being the extract with water. Thus *Bolduc Mem. Acad. R. An.* 1709. p. 227—232. *Edit. Paris.* 1711. in 4to. But I do not see how so much should have been lost: nor how the feculencies of ℥iv . should be only ℥ij , when ℥j , calcined in a crucible left cinerum ℥iiss . Why did he not specify the weight of the chymical principles? *Mr. Geoffroy* takes no notice of *Boulduc*’s experiments; nor does he favour us with any of his own. But—3. The Areca is said to be somewhat narcotic. “Fructus immaturus stupefacit et inebriat: editur autem immaturus a nonnullis, ut veluti temulentia, dolorum cruciatus non sentiant.” *Garz. Clus. Exot.* 188. “Areca, observantibus *Garc.* et *Bontio*, nondum matura, masticata vertiginem subitam inducit, non secus ac si sumpto vino quis ebrietatem contraxerit. Sed hæc alteratio, sumpto pauco sale et haustu aquæ gelidæ, breviter evanescit.” *Geoff.* ii. 727. “Fructus hujus immaturus vertiginem inducit, ac si sumpto vino quis ebrietatem contraxerit.” *Dale* 271. Has the Terra Japonica any such effect? *Mr. Jussieu* (l. c. viz. *Mem. Acad.* 1720.) says it has united in it the virtues of acacia, hypocistis, sanguis draconis, and succus glycyrrhizæ.

S E C T. III.

It is given to ʒʒ. but there does not appear to be any danger in ʒj. It is used in the decoctum dialcordii, loboch diatragacanthi, & troch sci de Terra Japonica.

“ Pharmacopolæ Londinenses Terræ Japonicæ nomine extractum ipsum prout adfertur intelligunt; catechu vero appellatione, compositum quiddam ex extracto moscho, ambra, &c.” *Dale*, p. 271.

T A R T A R U S.

S E C T. I.

Tartarus, Tartarum, *offic.* Tartar, Argal, or Winestone,—is an hard, heavy, saline concretion, found adhering to the inner surface of casks in which wine has been long kept, in form of a stony crust, of a whitish or reddish colour, and acid or acetous taste.

New, foul, or vapid wines yield no tartar. The tartar of white wine is whitish, and of red wine reddish: the white is the purest; but when both are separately dissolved and crystallised there is no difference. The best white tartar comes from Germany; as does also the best red. Tartar is not a stony concretion, nor wine-dregs; but a real though singular kind of salt, which may be called the essential salt of wine. No tartar is produced by liquors made of malt or honey. Vide *Boerb. Chem.* 2. *process.* 8. p. 39. *process.* 54. p. 223. & *alibi*, and *Helmontii Tartari Histor.* p. 223. § 8.

“ Veteres Tartarum a vini fæcibus non distinguunt. Reipsa eandem habent originem, nec multum inter se discrepant: si quidem mustum in doliis post absolutam fermentationem asservatum, per tempus duplicem deponit fæculentam substantiam. . . . Fæx vini est ipse Tartarus, seu sal essentialis vini, continuata hujus liquidi fermentatione attenuatus, & humore spirituosio solutus, &c.” *Geoff.* ii. 758. Strange!

S E C T. II.

Tartar is antiseptic, attenuant, diuretic, and cathartic; commended in obstructions of the viscera and chronic diseases thence arising; in ardent fevers, and in all bilious and putrid diseases, where heat and thirst offend.

“ Usus Tartari depurati est crassos tartareosque humores, præcipuè autem in prima ventris regione stabulantes, incidere ac attenuare: commodè itaque adhibetur in obstructione epatis, lienis, mesenterii, renum, in affectu hypochondriaco, &c. Hinc quoque sibi primas vendicat inter digestiva universalis, cujus rei gratia & cathartici præmitti plerumque solet. Quinimò ad laxandam alvum commodissimum medicamentum est, si saltem gr. i. ac altero diagridii aut gummi de gamandra acuatur. Dosis a ʒʒ. ad ʒj. vel ʒij. *Schrod.* p. 745. *Præparata* multa sunt à p. 744. ad p. 749.

1. It is an acid salt; and although water can scarce dissolve one twentieth part of its own weight of it, and that only when boiling hot, yet any alkaline or absorbent substance renders it easily soluble, at least if they be decocted together. If therefore the animal juices in the stomach and guts, as the bile, &c. assisted by the natural heat, are sufficient to dissolve it, it will have the virtues assigned it; but if otherwise it will prove only eccoprotic. After long chewing the crystals of tartar I could observe only a mild acidity, no styplicity. “ Ut solvatur penitus, exigit vigecuplum aquæ ebullientis, aut manet in fundo. . . In corpore humano, laborante bilioso acri, putrido, summum est corrigens: inde acutis proba medela. Purgat primas vias, vix turbans interiora. Cum acri putrido, amissa acedine, in materiem facile solubilem abit, tumque pulcherrimum exhibet remedium aperiens.” *Boerb. Chem.* ii. p. 40. “ The crystals require twenty-four times the weight of boiling water to dissolve in. . . Lime water is an active menstruum with regard to these salts, and may be so managed as to dissolve half its own weight.” *Lewis’s Pharm.* p. 70. “ Tartarus salis species est . . . saporis subacris, acidi.” *Dale*, p. 320. “ Est gustus acidioris quam fæx vini.” *Boerb. Chem.* ii. 39. “ Saporis acidi grati.” *Nucl. Belg.* p. 286. “ Saporis acidi subausteri.” *Geoff.* ii. 758. So some of it solvitur in ore. The water in which crystalli Tartari have been dissolved remains sowerish after it is cold, and the Tartar precipitated. Vide *Lemery’s Chem.* p. 689. — 2. Crude tartar (ex gr. 3xxxii.) consists of air (3x. 5v. 3j.) phlegm and spirit (3vij.) oil (3v.) acid 3vij.) and of terrestrial feculency (about 3ij. or 3iij.) “ By a chymical analysis, Tartari optimi 1biiij yielded phlegmatis 3iv; spiritus 3vij; olei 3iij; carbonis 1bij, (so that only an ounce was lost) whence salis alcali fixi 3xij.” *Lemery’s Chym.* p. 699. But, according to *Mr. Hales*, one third part of Tartar is air. Vide *Stat. Exp.* i. 184. “ Destillando Tartari optimi 3xvj, elicitor vix aquæ 3j, salis vero ad summum 3iiß: residuum totum est oleum: i. e. ex xvj. sunt fere xij. partes oleosæ,” says *Helmont* (*Tria Chymicorum Princip.* p. 395. § 8.) “ Dum vini Tartarus crematur, vix 3xvj. ejus dant 3iiß. salis alkali; ergo 3xiiiß. volatiles calcinando periere.” *Idem* (*Blasphumanum*, p. 179. § 39.) But he is little to be trusted: for Tartari crudi 3xvj. by calcination will yield salis alcali fixi 3iv. *Lem. Chym.* p. 702. which, purified by calcination, solution, and filtration, give terræ 3v. gr. v. *Ibid.* p. 703.

“ Tartarus multum salis acidi continet & olei, tum tenuioris tum crassi; aliquantulum salis volatilis urinose distillatione suppeditat, & salis alcali fixi portionem non mediocrem, cum terra, post distillationem in capite mortuo relinquit. Verum sal alcali, tum volatilis tum fixus, ignis foetus esse videtur; siquidem neque in Tartaro, neque in aliis mixtis corporibus hæc substantiæ manifestas se præbent, nisi obstetricante igne, vel artificiali in chymicis fornacibus, vel naturali in fermentationibus.” *Geoff.* ii. p. 760. Hence—3. Tartar is a very safe medicine: for if it be not dissolved in the primæ viæ, it only evacuates their contents, without weakening or disturbing nature; and if the humors are so acrid or putrid as to dissolve it, it corrects these qualities, consequently allays thirst, attenuates and gently evacuates; and may be of use in many diseases, as in dropsies, asthmas, colics, agues, &c. “ A Sala (in Tartarologia) de seipso narrat, quod, cum passione colica multoties miserrimè discrucietur, multis aliis medicamentis frustra tentatis, sumpsit Tartari pulverati

“ pulverati ʒvj. ex quo purgatus fuit, & a cruciatibus solutus, tandemque
 “ post idem aliquoties repetitum remedium, perfecte sanatus fuit.” *Geoff.* ii.
 761. Vid. *Lewis's Pharm.* p. 71. who says *Sala's* dose was ʒij. But in the
N. Disp. it is ʒvj. Vide p. 217. where there is a mistake relative to the pre-
 paring the crystals of Tartar at Montpellier.

S E C T. III.

Tartar in powder, or its crystals, may be given, as an alterative, to ʒij; as
 a cathartic to ʒj, partitis vicibus rather than at once. The preparations are:
 1. Cremor vel crystalli. 2. Tartarus solubilis. 3. Tartarus emeticus. 4. Tar-
 tarus vitriolatus. 5. Sal Tartari. And 6. Oleum Tartari per deliquium.

“ The dose is from ʒß. ad ʒijj. in any proper liquor.” *Lem. Chym.* p. 688.
 “ Exhibetur intus cremor Tartari, (*i. e.* crystalli quæ nunc in usum servantur,
 “ p. 759.) potius quam ipsum Tartarum, a ʒß. ad ʒij. si aperiendi tantum sit
 “ animus, vel cum aliis purgantibus stimuli vice permisceatur: verum quando
 “ absque ullo alio additamento, aut stimulo, purgantis munere fungi debet,
 “ ab ʒß. ad ʒvj. aut ʒj. sumitur.” *Geoff.* ii. 761. But perhaps the Tartar,
 as containing little feculency, is not worse, by no means hurtful, and pro-
 bably more easily dissolved: perhaps also somewhat may fly off in decocting.
 However it is seldom given crude.—I shall now examine the usual prepara-
 tions. And,

1. *Cremor Tartari offic.* & *crystalli Tartari offic.* These are in distinct pro-
 cesses in *Pb. Edinb.* p. 153 and 152: though the cream is not often kept, but
 the crystals are taken without any error, when either is prescribed. So that
 cremor Tartari, crystalli Tartari, Tartarus purificatus or depuratus, & aci-
 dum Tartari, are synonymous. Yet the *London Dispensatory* gives the pre-
 paration of none of them; though ordered in Tartarus emeticus, & Tartarum
 solubile. The Tartari crystalli, that is Tartarum purificatum, stands only
 among the simples; not very properly in my judgment. As to the preparation;
 if the dissolved Tartar pass not easily through grey paper, Hippocrates's-sleeve
 may serve: and what remains undissolved may be again dissolved in more boiling
 water. Vide *Schrod.* p. 745.

2. *Tartarus solubilis, offic.* is Tartar saturated with its own or (according to
 the *Pb. Lond.*) any other fixed alkali, whereby it becomes a neutral and easily
 dissolvable salt, more certainly attenuant, deobstruent, diuretic, than the Tar-
 tar, and as laxative, but less antiseptic. It is called also Tartarus tartarificatus,
 & sal vegetabilis: and given to ʒij. as an alterative, and to ʒß. or ʒj. as a
 purgative. It is called also balsamum samech Paracelsi, according to *Geoff.* ii.
 p. 767. V. N. B. p. 5983.

Tartarus solubilis of the *Pb. Edinb.* is thus made: “ & Crystallorum Tar-
 tari q. v. coque ad perfectam solutionem, ex aquæ font. decuplo solutioni
 “ bullienti infilla paulatim oleum Tartari p. d. q. s. *i. e.* donec cesset effe-
 “ vescentia liquor calidus adhuc filtratus evaporetur ad pelliculam ut crystalli
 “ in frigore concrecant.” *N.* Instead of *decuplo* should rather have been *vige-
 cuplo* or *q. s.*—The *Pb. Lond.* for this preparation, dissolves any fixed salt
 in boiling water, and throws in the crystals of Tartar (*in powder, adds Pemb.*)
 gradatim

gradatim (*omitted by Pemb.*) so long as any effervescencia (*fermentation, Pemb.*) is raised, which usually ceases before thrice the weight of the alkali is thrown in: then filters the liquor, and crystallises, or evaporates to a mass. Is salt of tartar no better than any other fixed alkali? Whether ought the alkali to be thrown into the acid, or the acid into the alkali? Is not crude Tartar as good here as the crystals?

There are many ways of making this preparation; for whatever can destroy the acidity of vinegar will make the Tartar soluble, if decocted with it in aquæ q. s. Thus Cretæ albæ p. i. is sufficient for cryst. Tartari p. ii. "Crystal. Tartari ℥viii. & salis Tartari ℥iv. give Tartari solubilis ℥xj. 5vj." *Lem. Chym.* p. 689. Is it thus alkaline? Is 5ij. a part of the alkali or lost? Vide *Mr. du Hamel's and Groffe's experiments. Mem. Acad. an. 1732. and an. 1733.*

"An vero sit jactatum Paracello remedium, quod samech vocaverat, cujus ille ope narrat, omnia vulnera recentia, absque ulla suppuratione, paucis coire horis, non dixerim, &c." *Boerb. Chem.* ii. p. 265: where he notices its use as a menstruum for lacca, myrrha, &c. and in several diseases, as the stone, jaundice, spleen, &c.

3. *Tartarus emeticus, offic.* Vid. p. 324. vol. i.

4. *Tartarus regeneratus, offic.* is the salt of Tartar saturated with the spirit of vinegar into a neutral oily salt, or penetrating sapo. It is much commended as a powerful resolvent and deobstruent, in obstructions of the viscera, and nerves; in cachexies, palsies, dropsies: and as a diuretic and cathartic. You have the process for preparing it briefly in *our Pharm.* p. 155. and at great length in *Boerb. Chem.* ii. 266. It is at best, according to these, tedious and expensive; but much more so Geoffroy's way. ii. 766. See *Lewis's Pharm.* 258. The *London* committee made some alterations on the process; but at last threw it out, substituting for it their sal diureticus. It is seldom made. Dosis ad 5j.

To saturate salis Tart. p. i. requires aceti fortis stillatitii p. xiv. or more, by which the weight of the alkali is increased nine twentieth parts. "Solicito Hombergiano labore patuit, pondus alkali auctum ab aceti acido, sic attracto, esse novem vigesimas respectu alkali. Et acidum hoc, respectu aceti, in aceto fuisse unam trigesimam septimam circiter partem totius. Reliquas triginta sex partes puram fuisse aquam. . . Vocavere hunc salem terram foliatam. . . . Sal hic siccus in igne flammam capit; summo igne destillatus oleum verum dat. (Is not the weight of the alkali increased by the oil in the vinegar?) . . . Dubitavi sæpe an non hic esset sal Tartari volatilis redditus Helmontianus . . . maxime cum & ceræ instar fluat ad ignem. Veterum certe chemicorum acetum radicum videtur habendum." *Boerb. Chem.* ii. p. 268.

5. *Tartarus vitriolatus offic.* Vide Vitriolum. p. 209. vol. i.

6. *Sal Tartari offic.* is an acrid, caustic, fixed alkali salt, extracted from calcined Tartar by dissolving it in water, filtering and evaporating to dryness; and is an acrid, antacid, attenuant, resolvent, diuretic, and caustic substance. It is recommended in all diseases from acid, viscid, phlegmatic, crude or cold humors or causes.

This is the strongest of all the pure alcalies, and no substance whatsoever yields so much of it as does Tartar, although itself an acid. Tartar ℥j. dat salis

salis *Æiv. Lem. Chym.* p. 702. It burns the tongue, or skin, like a hot iron; but, sufficiently diluted, tastes urinous; and makes animal juices fœtid and volatile. I know none who has explained the nature of this and of all such fixed alcalies near so well as our Boerhaave. “*Dicta de virtute alcalium*” (*Chem. i.* p. 764—803.) in corpora humana, compendio referam. 1. Acidum omne ibi brevi destruit; quia paucum, satis mite, nec nisi in primis viis. 2. Si occurrunt acido effervescent, flatus, ructus excitant, mobilitate stimulant, in salem neutrum abeunt, qui dein innoxius, penetrabilis, aperiens, diaphoreticus, diureticus, antisepticus, novos effectus præstat. 3. Motu hujus effervescentiæ nervos stimulant, spiritus movent, priores motus nervorum & spirituum mutant: hinc spasmos hypochondriacorum & hysteriarum, hincque pendentes morbos sæpe curant. 4. Attenuant quæ acido coiverant: quare in coagulo lactis, prudenter data pulchra præstant: alia quoque tenacia solvunt satis feliciter. 5. Glutinosa, oleosa, pingua, faciunt attenuari, & aquæ commodius misceri, unde deterfio: moderato igitur usu officinam chylopoieticam sorde glutinosa liberant. 6. Bilis quoque, lymphæ, sanguinis, feri coagula resolvunt, vi vitæ introrsum admissa, atque ibidem agitata. 7. Acri stimulo suo simul inertia movent, hincque urinam, sudorem, salivam, movent: unde diaphoretici, diuretici, sudoriferi censentur; quin & alvum cient. 8. Igitur in morbis quibus inest iners, lenta, mucosa, pituita; acedo hinc alimenti vegetabilis in primis viis; austeri acrescentis materia vel effectus coagulatis manifesti; abundans feri aquosi colluvies; concretum pingue, tenax, morbi hinc sæpe orti, hydrops, icterus, leucophlegmatia, podagra, rheumatismus, scorbutus, usum habent eximium, si prudenter, bene diluti, dosi exigua, tempore idoneo, porriguntur. 9. Chirurgis auxilia efficacissima præbent: caustica vi dum exurunt escharas pro fonticulis faciendis; ulcera sordida mundantur; corrupta per gangrænam loca separantur; verrucæ exstirpantur. . . 10. Tandem scire est, perniciosum esse usum horum salium, in omni morbo, in quo sales nativi degenerare incipiunt in naturam acrem, alcaliscentem, putridam, volatilem; ubique olea se disponunt ad acrem, foetidam, putridam, rancidam, volatilem indolem, nidore exhalante, & urinæ colore rubro, manifestam; inprimis autem exitiales sunt, quoties fel evasit tale, & quando humores nimis dissoluti, fluidi, septicæ, unde in peste præsens fere venenum. Hinc ergo, in inflammatione, suppuratione, gangræna, sphacelo, febribus continuis, putridis, morbis a nimia velocitate pendentibus, omnino vitandus horum usus internus. 11. Cautus esto usus, drachmam vigecuplo aquæ diluat, hujusque ultra drachmam simul vix assumat, repetatque sollicitâ cum cautela.” Thus *Boerb. Chem. ii.* p. 59. “*Salis Tartari* dosis a gr. xij. ad 5ß; præscribitur. Magna aquæ copia solvi debet.” *Geoff. ii.* 764. I think it enough to give it to gr. v. in cochl. i. aquæ. For the use of this salt as a menstruum consult *Boerb. Chem. l. c.* and for the analysis Tartari, p. 225.

Of sal Tartari, (p. i.) and oil of turpentine, (p. ii.) artfully united, is made the *sapo tartareus*, offic. *Ph. Edinb.* p. 155. about the right preparation of which authors widely differ, as well as with relation to its use. Compare the processes; *Boerb. Chem. ii.* 261; *Wilson's Chym.* p. 234; *Geoff. Mem. Acad.* 1725, &c. and see *Lewis's Pharm.* p. 260, and *Narrat. Pemb. Dispens.* p. 106. The *Lond. Pharm.* has deservedly thrown it out, and the pil. Matthæi, in which

which only it was used, along with it; substituting a better and more simple pacific in its place, viz. the *pilulæ saponaceæ*. Vide Opium.

7. Oleum Tartari per deliquium, seu liquamen salis Tartari, offic. is a salt of Tartar dissolved by the moisture it attracts from the air. It is called Lixivium Tartari in *Pb. Lond.* *Annon potius lixivium dicendum?* “Sal hic est
“verus aquæ magnes, qui impatiens sicci, aquam ex aëre trahit, cum eo
“dissolvitur, & decurrit in liquorem pinguem, quem oleum alcalinum per
“deliquium vocant. Quod charta percolatum purissimum evadit, pondero-
“sissimum post oleum vitrioli, inter salina. Sed & acida in aëre vaga simul
“trahuntur cum aqua in hoc alcali, id mutant, pro indole suâ, ut evadat
“penitus alienus sal, a pristina suâ naturâ, accedatque ad ingenium salis, a
“quo illud acidum fuerat natum. Si acidum sulphuris in illo aëre prædomi-
“natur, ibit in naturam Tartari vitriolati: si nitri, verget in nitri indolem:
“si salis marini, ibidem salsum marinum generabit: si aceti halitus, tartarus
“regeneratus: si olea valde attenuata locum replent, tum orietur saponis æmu-
“lus sal.” *Boerb. Chem.* ii. 56.

Nº. 10. Sal hic in oleum per deliquium versus, iterum exsiccatus, fusus
“igne, rursus aëris humido deliquescent, repetito hoc opere tandem in fæces
“terrestres, & volatile, resolvitur.” *Ibid.* p. 58.

MATERIA MEDICA.

PART III.

OF ANIMAL SUBSTANCES.

LECTURE LXXVIII.

A P E S.

S E C T. I.

APES, offic. *Schrod.* p. 859. *Aldrov. de Insect.* 20. *Icon. Insect.* 1. *Monf. Inf.* 1. *Dale* 356. *Apis*, *Charlet. Exerc.* 36. *Apis domestica* seu vulgaris domestica, *R. H. Insect.* p. 240. Bees.—These are four-winged, six-footed and aculeated insects, which furnish us with honey and wax, which need no description.

The industry, curious œconomy and policy, of this wonderful and everywhere common little creature, have employed the attention and been the admiration of the learned in all ages. Many volumes have been written concerning them, and yet to this day the subject is not exhausted. Their cells were long ago demonstrated by the famous mathematician *Pappus Alexandrinus* (who flourished in the time of *Theodosius* the Great, *Imper. ab An. D.* 383. to 395.) to be of the most regular and every-way most convenient figure. And that these little architects have not only studied the beauty and usefulness, but also the strength, of their edifices, and the most frugal and thrifty way of erecting them, doing it at the least expence that possibly could be, the late *P. M'Laurin*, one of the greatest ornaments of our university, has sufficiently evinced. *Vid. Phil. Transf.* No. 471, for Nov. 1743. p. 565. or *Abridgment*, vol. ix. part 3. p. 2. *Of the bases of the Cells wherein the bees deposit their Honey*, by Mr. M'Laurin.

The very great and accurate *Job. Swammerdam*, in his *Biblia Naturæ*, published by Boerhaave and Gaubius in Dutch and Latin at Leyden, in 1738, 3 vol. in folio, treats of bees in vol. ii. à p. 367 ad p. 550. And yet we are in the dark as to many things worth knowing concerning them.

“ Apes distinguit Swammerdamius, in 1. Regem, seu veriùs reginam, si-
 “ quidem sequioris sexus est. 2. Fucos, qui masculi propriè sunt. 3. Apes
 “ operarias, quarum sexum distinguere non potuit.” *R. Hist. Insect.* p. 240.
 Which is not altered in the *Biblia Naturæ*. The queen may well be considered
 as such, since she is the mother of all her subjects. Here is one wife for two,
 three, or I do not know how many, hundred husbands. A most numerous
 offspring, yet no coitus ever observed! *Quam magna & varia opera tua*
Domine!

Mel, *offic.* honey is commonly known. Whether it is only collected, or also
 prepared, by the bees, that is whether it is more properly an animal or vege-
 table juice, is not so certain: but the last seems most probable. For certain
 it is that many (if not all) flowers, even of bitter herbs, *ex gr.* aloes, contain
 a sweet honey-juice, in which the bees seem much to delight; as they do also
 on the leaves of such trees as transude the same sort of juices, improperly
 called honey-dews. (α) Such juices the bees seem to feed on which are called
 the working bees, and to carry also what they have not present occasion for,
 in their stomachs, to their hives, for the provision of their sovereign and her
 husbands, so long as she has use for them; after which they are destroyed,
 that they consume not what their queen and they must live on during the
 winter. (β) If the honey of a hive be exhausted before the end of the win-
 ter, the whole swarm dies, unless they be fed with other honey, syrup, or some
 such sweet juice. (γ) The flavour of the flowers which abound most, in the
 country where the honey is made, is sometimes observable in it: as that of
 rosemary in the Narbon honey, of lime-tree flowers in the Lith, &c. “ Aqua
 “ mellis odorem fundit mellis proprium, in quo sæpè fragrantia superstes
 “ florum, unde Apes collegerant.” *Boerb. Chem.* ii. 165. Hence *Virgil* ad-
 vises

“ Hæc circum casæ virides, & olentia latè

“ Serpilla, & graviter spirantis copia thymbræ

“ Floreat: irriguumque bibant violaria fontem.” *Geor.* 4. v. 30.

And lastly (δ) Honey is acescent, and much a-kin to manna and saccharum;
 yet differing in several things from both.

Not only the seasons and soils have influence on the honey, but also the age
 of the hives, manner of separating it from the combs, as with or without heat
 or water. The best honey is altogether clean, of a fair yellowish white colour,
 or a little greenish; neither too hard nor too liquid, but thick and corny;
 and as agreeable to the taste and smell as may be; which if it be from hives
 of one year, which have never swarmed, it is called virgin honey, and will
 dissolve intirely in water without making it muddy. I have seen very white
 honey not near so sweet and pleasant to the taste as some very brown honey.
Lemery says they have a way of counterfeiting the Narbon honey; and no doubt
 they can also artificially whiten it.

Cera, cera flava, *offic.* Common wax, is the substance of the honey-combs,
 remaining after the separating of the honey from them, refined by melting it
 in boiling water. Wax is thought never to enter the bodies of these insects;
 but only to be gathered, or brushed off of the surfaces of the leaves and
 flowers of vegetables, by their rough paws, with which, being formed into
 little

little balls, they load their hinder legs; and thus carry it into their hives, and with it build and strengthen their apartments. Bees are commonly observed to fly out of flowers, with a yellow dust-like substance adhering to them, which is thought to be the powder of the apices. But, according to *M. Geoffroy, Mem. Acad. An. 1711*. “these little grains of the apices do not dissolve in oil-olive, oil of turpentine, nor spirit of wine: though they draw a tincture from them, they change little of the figure of their grains; neither do they melt in boiling water nor in the fire, in which last they burn to a carbo, without melting; so are not wax.” But farther,

Although wax is a resinous substance, very inflammable, melting and consuming intirely in the fire, without leaving any ashes behind it, dissolving easily in oils, yet “it is not soluble in spirit of wine; boiled in it, it (only) losing its yellow colour, becomes white, and of a softer consistence.” *Lewis’s Pharm.* p. 72. And in its chemical analysis, it differs so widely from all purely vegetable sulphurs known, that it seems to owe more to the insect than simple collection.

Cera alba offic. is yellow wax purified and whitened by repeated meltings, and the influence of the sun and air on it, when reduced into thin plates, or into small grains, by pouring it melted into cold water. *vide Sav. Diſt.* vol. ii. 765. & vol. iii. col. 180—192. Common yellow wax soon turns whitish on its surface in the common air: the yellower therefore wax is, it is the fresher, if genuine.

The consumption of wax is prodigious. “There were, preceeding 1688, imported to Marseilles from Provence, Barbary, and the Levant, yearly, between 350,000 and 400,000 pounds weight of it.” *Sav. Diſt.* iii. 451; besides vast quantities made in other provinces of France; and also imported from Holland, Dantzick, &c. Hence you may judge of the quantity of honey made by, and the usefulness of, this industrious little creature.

“Propolis (*προπολῖς*) usurpanda flava, odorata, styracem referens, in summa ariditate mollis & mastiches modo ductilis. Vim autem obtinet vehementer excalfaciendi, attrahendi, & aculeos quoque corpori infixos extrahendi. Sed & in veteri tussi suffito auxiliatur, & lichenas imposita tollit. Cæterum circa alvearium oscula reperitur. Cerae natura similis.” *Dioscor.* l. 2. c. 106. Et hoc totum est quod de propoli habet. “Propolis crassioris jam materiae, additis floribus, nondum tamen cera, sed favorum stabilimentum, quo omnes frigoris aut injuriæ aditus obstruuntur: odore & ipsa etiamnum gravi, ut qua plerique pro Galbano utantur.” *Plin.* l. 11. c. 7. “Propolis extergentis non ita valentis est facultatis, cæterum admodum valenter attrahentis: est enim essentia tenuium partium. Porro excalfacit ordine 2. completo, aut 3. incipiente.” *Galen Simpl.* l. 8. fol. 59. B. Oribasius, Aetius, Paulus, only copy Galen. *Scribonius Largus* says, “Quidam ceram sacram vocant.” fol. 206. D. The moderns copy the ancients. I know little about it; it is never kept here, and I believe used no-where. *Vide, si placet, Schroder 861. Dale 356. Lem. Diſt.* p. 442.

S E C T. II.

Bees are called attenuant and diuretic, and commended in dropsies and nephritic pains; and outwardly for baldness, to make hair grow: but are little used.

Honey is diluent, detergent, emollient, and antiseptic; and also nourishing; called pectoral, diuretic, laxative, and vulnerary; and commended inwardly in coughs, consumptions, asthmas, contusions, internal ulcers, heat of urine, sore mouths, &c. and outwardly as deterfive, for ulcers, &c. *Cum saccharo convenit.*

Wax is antiseptic, anodyne, balsamic, and digestive; called diuretic and nervine; and commended by some (says *Herm. Cyn.* 717.) in fluxu alvi, & ictero. But it is little used internally, except in bals. Locatelli: outwardly it is much used in ointments, cerates, and plaisters.

“Apes siccae & contritæ, inunctis alopeciiis, capillum restituunt. Mel calidum ac siccum statuitur gr. 2. (albicans tamen minus calidum censetur.) Nutrit, abstergit, aperit, pulmonibus convenit, urinam ciet, tussi medetur, putredini resistit. Extrinsecus oculorum caliginem discutit, aliisque eorum affectibus succurrit. *Cautio.* Mel quia facile bilefcit, epati, calidioribusque corporibus non adeo proficuum est. Mel crudum alvum inflat, tussim laceffit, fastidium creat. *Præp.* 1. Mel depuratum. 2. Mel destillatum, unde aqua, spiritus, oleum, &c. Cera, medium quodammodo tenet calfacientium, refrigerantium, humectantium & desiccantium, ita tamen, ut ad caliditatem inclinet, partium quadantenus est crassarum & emplasticarum, ideoque digerit, maturat, &c. N. adeo usitata officinis est ut vix emplastrum reperiatur, cujus non exhibeat consistentiam. *Præp.* 1. Oleum ceræ: diureticum est daturque intrinsecus, dos. gut. iii. iv. v. 2. Balsamus vulnerarius. 3. Magisterium ceræ.” *Schroder* 861, 862.

It may be observed of animal substances in general: 1. That they naturally tend to putrefaction, if juicy, which heat accelerates; and when putrid are acrid and alkaline. 2. That though they agree in many things, yet there is also discoverable by our senses a considerable difference among them: thus some are soft, insipid, or sweet to the taste; others bitter, acrid, caustic: some have no scent; others are strongly odoriferous, perfumed, or foetid: some parts of animals differ little from absorbent earths; and are very fixed; others are very volatile. 3. By a chemical analysis much the same principles can be got from every animal, though not always in the same proportions. “Ex analysi chemica partium animalium constat derivari inde posse. 1. Spiritum quendam subfoetidum, volatilem, tenuem, aqua mistum, difficulter ab aqua separabilem. 2. Aquam satis puritate accedentem ad elementalem, nisi quod spiritum illum vix unquam queat dimittere. 3. Salem alcalinum volatilem. 4. Oleum tenue volatile. 5. Oleum crassius. 6. Terram ubique eandem. 7. Phosphorum & in eo acidum fortè ponderosum. 8. Salem marinum, ubi is in cibo potuque fuit assumptus, non aliter.” *Boerb. Chem.* ii. p. 376. Now

Bees are eaten by little birds, so seem not to be acrid in any part, except in the virus they convey by their sting, which perhaps would not hurt the stomach.

stomach. They feed on a variety of fine vegetable juices, and so may, perhaps, have very great specific virtues: but if there be any such virtues in them, they are not known; so that bees are little used. What effect can they have in baldness?

1. Honey is very sweet, viscid, scarcely aromatic; it dissolves in water, spirits and oils; flames in the fire; easily ferments into wine or vinegar, and so yields either an inflammable or acid spirit by distillation. It dissolves also oils and resins, and renders them permiscible with water. Hence it agrees with sugar in many things. — 2. “Chymically analysed mellis lbiv. (of ℥xvj. each) gave phlegmatis subacidi ℥xxv; spiritus fusco-rubicundi, saporis acidi ac acris ℥xij. and along with it olei fœridi nigri parum; & carbonis ℥xxv. (so lost ℥ij.) which, calcined ten hours, lost but ℥v. or vj. and yielded salis fixi 5lb. and the residuum, again calcined, contained some particles which “a magnetic knife attracted.” *Lem. Chym.* p. 871. *vid.* Manna. “Mellis Narbon. lbij. gave phleg. ℥x, spiritus ℥xij, olei 3ij, carbonis ℥vij. 3vj. (undè were lost ℥ij.) whence were got salis fixi gr. xv. circiter,” according to *Lemery, Mem. Acad.* 1706. p. 352. — 3. Honey has been much used in food, as well as medicine, in all ages; but much less, since sugar became so common, than formerly. “Mel calidum & siccum est, si sincerum; cum aqua vero humectat, & biliosis alvum dejicit, pituitosis autem sistit.” *Hippoc. de Dieta*, l. 2. p. 529. *lin.* 54.

“Mel vim habet smeeticam, anastomoticam, humores evocantem: qua ratione in fordida ulcera sinusque commodè infunditur.” (He commends it for tetters, with alum; pains & tinitus aurium, with salt; for lice and nits to kill them; inflammations of throat and tonsils; dimness of the eyes, &c.) “Urinas quoque ciet, tussique auxiliatur, & iis quos serpentes momorderint: itemque contra haustum meconium, si cum rosaceo calidum assumatur. Quin & contra fungorum maleficia, & rabiosi canis morsus, delinctum potumve proficit. Attamen crudum alvum inflat, & tussim irritat: qua de causa despumato utendum est.” *Diosc.* l. 2. c. 101. p. 121.

Honey gives, to some, severe pains in the stomach, and colics, though taken in never so small a quantity: which can neither be attributed to its acid, nor to its fermenting, or generating air; since sugar has no such effect, and honey has it only on a few. Whether despumation will prevent it, I never tried; but I found nothing but vomiting could cure it. This quality it has from the bees.

1. Wax has no acrimony, is a singular kind of resin agreeing in some things with lacca, and probably is as difficultly digested. For 2. By a chemical analysis nothing can be got from it, but an acid fetid spirit, and oil, which at first, when cold, takes the form of butter, and so is called butyrum ceræ; but, by repeated distillations, more and more acid spirit separating, it becomes a fluid oil. “Ceræ ℥xvj. yield only olei ℥iiib; all the rest is sowerish water, which must weigh ℥xiib.” (true, if nothing evaporates during the process) “no dry salt, no earth can be separated from it.” *vide Hist. Acad.* 1708. p. 64. *Lem. Chym.* p. 872. *Beerb. Chem.* ii. 154. “Est conversio hæc ceræ in butyrum constans: nam inde tempore diuturno, non nascitur iterum cera dura, sed manet semper hoc butyrum molle, vel in summo frigore. Id expertus loquor. . . Quum liquidissimum terebinthinæ oleum, citò in spissitudinem

“terebin-

“ terebinthinæ liquidæ redeat.” *Boerb. Chem.* ii. 156. This butter and oil is much commended for fixed pains, contractions of the nerves, chapt lips, mammæ, &c. “ In curandis fissuris labiorum hybernis, in fissuris papillarum “ in lactantibus, in digitorum manuumque rhagadibus, vix aliud habet simile “ si subinde levi illitu applicatur.” *Boerb. Chem.* ii. 157. “ Oleum ceræ cica- “ trifans est summum, citissimè ulcera carne replet. Internè colicos dolores “ sedat, flatus discutit. Dosis a gut. i. ad viij.” *Le Mort. Col. Chym.* p. 144. It probably relaxes, or softens the fibres; and thus proves anodyne. I can expect nothing else from it.

S E C T. III.

The dose of honey need not be determined; and I am not for giving wax inwardly. Is mel mercuriale ever rightly made? Mel rosatum is a good medicine. Honey is an ingredient in the oxymel pectorale, ox. scilliticum, & ox. simplex, electuarium lenitivum, mithridatium, theriaca, ther. *Edinensis*, pilulæ mercuriales utræque, trochisci cypheos, & unguentum Ægyptiacum: and wax in the ball. Locatelli, electuarium antidyfentericum, unguentum album utrumque, ung. antipforicum utrumque, U. basilicon, U. è lapide calaminari, U. desiccativum rubrum, U. dialthææ, U. diapompholigos, U. epispasticum, U. populeon, U. sambucinum, U. saturninum, U. tutiæ, & U. vermifugum; in the emplastrum antihystericum, E. cephalicum, E. defensivum, E. diachylon cum gummi, E. epispasticum compositum, E. è meliloto, E. stomachicum, E. oxycroceum, *Pharm. Edinb.* 1744. wherein is also oleum ceræ.

“ Ludovicus Locatellus natus est Bergami; chymicus egregius; & Me- “ diolani practicus celeberrimus, ubi arcana plurima ægris salutaria composuit, “ & chymici famigeratissimi nomen acquisivit. Genuæ tandem, contagio “ grassante, obiit. A.C. 1657. nondum senex.” *Lind. renov.* p. 764. A very arcanum monger!

“ *Apes preparata.* Apes vasi idoneo inclusæ siccentur calore lenissimo.” *Pb. Edinb.* p. 31.

A S E L L I.

S E C T. I.

Afelli, Millipedæ, Onisci, *offic.* Afelli, *Insf. Insect.* 126. Afellus, *Mouf.* 202. *Charlet. Ex.* 57. Oniscus five Afellus, *Aldrov. Insect.* 632. Afellus. A sow, tyler-louse, thurf-louse, cheese-bug, cheese-lip; *Mouf. Merr. pin.* 203. Afellus lividus major. *R. Hist. Insect.* p. 42. Afelli, Millepedes, Onisci, *off.* Wood-lice, Sows, or Church-bugs, *Dale*, p. 354. *Vulgo* Millepedes, or Slaters.—These are small, many-footed insects, with a callous jointed back, of a dark livid colour, of a sweetish taste, and smell somewhat fetid.

It is very common in old walls, under stones, &c. almost every where. Afelli, *ὀνίσκος*, & *ὄνκις*, a colore asinino: they are called also porcelliones. Some distinguish between Afelli and Millepedæ: *Pliny's* Millepedæ differing from *Dioscorides's* *ὄνκις*.

“ Millepedæ (ὄνεις) quæ sub vasis aquariis reperiuntur, animalcula sunt multorum pedum, quæ quidem contacta manibus in globulos se contrahunt. Hæ ex vino potæ urinæ difficultati ac ictero auxiliantur. Illitæ vero cum melle angina correptis profunt. Tritæ & in cortice mali punici, addito rosaceo, calfactæ, ad dentium dolorem (ὤτραλγίαν) efficaciter instillantur.” *Dioscor.* l. 2. c. 37. p. 98. “ Millepeda, ab aliis centipeda, aut multipeda dicta, animal est è vermibus terræ pilosum, multis pedibus arcuatim repens, tactuque contrahens se, Oniscion Græci vocant, alii tylon: efficaciter sanat aurium dolores, &c.” *Plin.* l. 29. c. 6. p. 730. lin. 23. “ Confundit Oniscorum historiam, cum descriptione Millepedæ, &c.” Vide *Dalecampium* in locum Plinii citatum.

S E C T. II.

They are antacid and attenuant; called deobstruent, diuretic, and lithontriptic; and commended in the asthma, jaundice, nephritic pains, colic, convulsions, rheumatism, hæmorrhoids, scrophulæ, cancers, &c. and what not.

“ Afelli tenuium partium sunt, digerunt, extenuant, abstergant, aperiunt. Hinc utilitatis peculiaris sunt in mucilagine tartarea resolvenda, calculoque ad mucilaginem reducendo, in obstructionibus viscerum aperiendis, adeoque in morbo regio, in dolore nephritico, difficultate urinæ, in colica, appetituque ob ventriculi mucilaginem, imminuto, in asthmate, &c. Extrinsecus commendatur pulvis ad affectus oculorum, ad aurium dolores, & anginam (cum melle illitus). Vivus impositus phagedænam perimit. Dosis a ʒj. ad ʒj. N. 1. Non facile ʒj. transcendendo, nec usum continuo, nimia quippe resolvendi vi, incommoda non parva inferre possunt. N. 2. Ut locus natalis saxosus, indicat ad calculum Afellos facere; ita indicante aptitudine & propensione sese contrahendi, ad convulsiones forsan non essent inutiles.” *Schrod.* p. 863.

1. They are not acrid. “ Multipedæ sunt parva animalcula, inter lapides antiquorum ædificiorum degentia, in dorso squamosa & fusca, in ventre coloris cinericei, habentia septem paria pedum, odoris ingrati & fœtidi; saporis nitroso-urinofi.” *Nucl. Belg.* 197. “ Millepedes have a faint disagreeable smell, and a somewhat pungent sweetish nauseous taste.” *New Disp.* p. 162. They afford the same chymical principles with vipers, and other animals. “ The carbo, remaining after the distillation of Millepedes, being calcined, Mr. Lemery found some iron in the ashes. He found it also in the ashes of other animal substances, but not always. C.C.C. ivory, oculi cancrorum, oyster-shells, did not yield it: whereas he always discovered it in the ashes of vegetables.” *Hist. Acad. (Edit. Paris)* 1709. p. 39. No fixed alkali, no nitre, were got from them; although the Academy attributes their virtues to a nitrous salt, on which they feed, “ on the roofs of houses, in caves, chinks of walls, and in moist and nitrous places, where they are found.” I fear nitre would rather poison than nourish them. But—2. They do not appear to be cooling. “ Millepedes sanguinem calefaciunt. . . .” Valent ad arenulas, hydropem, icterum, scrophulas, asthma, tussim, phthisim incipientem, cancrum, visus debilitatem, & ad cutis venustatem, colo-

“ remque

“ remque faciei elegantem conservandum & renovandum. Audivi, sed nondum satis expertus sum, Millepedes vespere crebrius & copiosè exhibitas, urinæ acrimoniam excitare, ejusque remedium adæquatum esse balsamum capivi.” *Fuller, Ph. Ext. Expr. Millepedum.* They are certainly putrescent. — 3. They are wonderfully commended in too many diseases; as in the stone, cachexy, tympanitis, spleen, vapours, tussis, convulsiva, palsy, headache, scurvy, arthritis vaga, tumors, wounds, ulcers, &c. (*vide quæ supra*). “ Centum Aselli mediocres, ut plurimum unciam pendent.” *Vide Boecleri Cyn. p. 774—780. si placet.* “ Their deterfive qualities scour even the minutest passages, and keep the nerves clean . . . whereby they are good in palsies, epilepsies, and all nervous distempers. And likewise because they open, and as it were by their minuteness and asperities cut their way through any obstructions, they are good in strumas, scrophulous tumors, and inveterate ulcers.” Thus (learnedly) *Quincy, Pharm. p. 151.* “ Whether they have any just title to these virtues, is greatly to be doubted: thus much is certain, that their real effects come far short of the character usually given them.” *N. Disp. p. 162.* And—4. Though the dose is commonly made to ʒj. yet *Schroder* dares not exceed ʒj, nor continue even the use of so much. *Etmuller* seems to agree with him. *Nucl. Belg.* goes the length of ʒij. But *Fuller* gives ʒβ. yea, No. 50. twice a day (quotidiè). Upon the whole I think there is reason to think Millepedarum ʒj. is good for nothing; and ʒβ. not much worth.

They may be given to ʒj. and upwards; are prepared by exsiccation; and give name to a wine. “ The best way of taking the Millepedes certainly is the swallowing them alive;” according to the editor of *Pomet*, ii. 57: though this is rather the worst way. They are taken in powder, bruised in wine; or any other way.

L E C T U R E LXXIX.

B U F O.

S E C T. I.

BUFO, *offic.* Bufo, *Aldrov. Quad. Ovip. 609. Ions. Quad. 131. Charlet. Exerc. 27.* Bufo terrestris major, *Schwen. Rept. 159.* Rana rubeta tum palustris tum terrestris, *Gesner Quad. Ovip. 64.* Bufo seu Rubeta. *R. Syn. Quad. p. 252.* The Toad.

“ Magnitudine ranam superat: corpore est crasso, dorso lato, ventre turgido & inflato, unde ob gravitatem saltare vix potest; cute, ut aiunt, densissima, & tuberculis inæquali. Colore lurido & nigricante, & in ventre maculoso, naturæ quodam instructu horrorem aspicientibus incutit; ipsoque vultu & incessu, & locis in quibus stabulatur opacis, concavis, squalidis & putridis, malignum & noxium se esse fatetur. . . Existimo enim, naturam nobis venenatorum & nocivorum animalium metum ingenerasse. Quis enim ad serpentes, etiam primum visi, aspectum non totus cohorrescit, & se subducit?” *R. Syn. Quadrup. p. 252.*

It is said to feed on the earth, by some; on insects (particularly bees) by others: I could never discover what it lived on. It is said also to poison plants, particularly sage, sometimes, by its saliva and urine; and to squirt out its noxious urine in its own defence; which swells the part it touches, and causes symptoms something like such as follow the sting of a scorpion. "We find not toads so venomous in our temperate climate as in hot countries." *Lem. Diæt.* p. 91. I doubt of their being any way poisonous here. How the male toad proves midwife to the female, see in *Hist. Acad.* an. 1741. p. 39—43.

S E C T. II.

It is called diuretic, sudorific, and alexipharmic; and commended inwardly in obstructions of urine, dropsy, pestilence, &c. And outwardly applied it is said to provoke urine, cure carbuncles, stop hæmorrhages, &c. Imagination sometimes cures, sometimes kills. *Nihil affirmo.*

"Etsi animal sit deterrimum venenosum, ac abominabile, attamen non effugit usum medicum. Internè pulvere ejus hydropicorum aquas per urinam educi, desperatus quidam expertus est hydropicus, qui præter spem attentatæ necis sanitatem illo acquisivit. Dosis ʒß. (*N.* mallem ego minorem.) Extrinsecus imponitur, parte qua venter est, anthracibus, ad eliciendum sc. venenum. Ingređitur itidem amuleta, aëri contagioso arcendo dicata; hæmorrhagiam narium, certo experimento sistit. Idem & pulvis cinis præstare perhibetur. Renibus impositus aquam inter cutem per urinam pellere dicitur, umbilico alligatus, fluxus hystericos retrahit & inhibet. Plantis pedum appositus, capitis, cordisque morbis, phrenitidi, febribusque succurrere statuitur. *Præp.* 1. Amuleta varia. 2. Pulvis (mallem equidem bufones incineratos). 3. Sal ex cineribus. 4. Oleum coctum. 5. Oleum compositum." *Schrod.* p. 796.

1. I have seen toads handled without any prejudice done by them; and have heard many credible accounts of their having been eaten in part, and that raw, *sine roxa*; besides what is related of the Brasilians, &c. in America: as also of their being applied alive to the loins in obstinate obstructions of urine, and that too with success, and without any ill effect. If their urine inflames and ulcerates the skin, as it is said to do, it would be observed in such cases, where the animal is forcibly detained upon a part. "In insula Peragua Hispanos coctos bufones, fame premente, edisse Petrus Martyr author est. "Lerius Brasilianos minime exenteratis & tostis vesci prodidit." *Ionf. Quad.* p. 133. "Observatione dignum est quod sibi experientia compertum esse testantur Wierus & Varignana, bufonem per ventrem sectum, & renibus alligatum, aquas hydropicorum per urinam educere." *Hoffm. in Schrod.* p. 591. *Van Helmont* explains this. "Authores aliquot commendant bufones vivos, utrimque renibus alligatos, solvere hydropem per lotium. Saltem vidi rusticum hydropicum sanatum, alligata anguium senecta per ventrem & renes. "Inducitur nempe idea metus renibus qua indignationem amittant." *Ignot. Hydrops.* p. 494. § 36. And the effect of such applications on the mind, the apprehension, fear, and horror our natural aversion to them excites, may produce wonderful changes, and why not sometimes cure as well as kill.

Some die for fear, others bepis themselves. About the year 1700 some foolish youths gave a man, for dried beef, some flesh cut out of a malefactor's hips, who had hung some years in chains: he broiled and eat it; and probably had received no injury from it, if they had not, some time after, told him what it was: but so soon as he knew it, he fell into a vomiting which, as is said, continued till he died. — 2. What is commonly said of the virulency of this animal is copied from the ancients. “Tum Rubeta, tum etiam rana palustris (ὄρυγος ἢ βατραχος ἐλεϊος) assumpta corporis tumorem ciet, cum intenso pallore, qui buxi colorem imitatur: accedit spirandi difficultas, & gravis halitus oris singultusque, ac interdum invita genitrix profusio consequitur.” His qui sumpsere facillè succurritur secundum vomitionem largiore meri potu, & arundinis radice sij, aut cyperi totidem. Cogendi quoque sunt ut vehementi ambulatione incitatoque cursu corpus exerceant, ob torporem qui ex hoc malo nascitur. Quinetiam quotidie lavandi sunt.” *Dioscor. Alexiph.* c. 31. p. 413. Vid. *Æt. Sermon.* 13. p. 641. c. 54. *Pauli*, l. 5. c. 35. p. 546. Whatever aversion we may have to vipers, their flesh has nothing hurtful in it. I reckon the same holds in toads. But—3. Is not the powder of a dried or burnt toad strongly diuretic and sudorific? The manner how the diuretic virtue of this animal came to be discovered makes me a little suspect it. “Specialiter autem commendatur Bufo ad hydropem; qua de re sequentem Solenander in consiliis refert historiam. Decubuerat Romæ hydropicus quidam, cujus uxor, sumptuum tandem pertæsa, veneno illum tollere malitiose statuit, quare Bufones in olla usti pulverem ægroto infcio propinat, unde ille copiosum reddidit lotium; hinc denuo eundem pulverem exhibet, ut citius ærumnosam sumptuosamque vitam cum præcipite commutaret morte. Qui vero uberiore exonerata per vesicam saburra aquea, præter conjugis expectationem, convaluit.” *Boecler. Cyn.* 1. p. 787. “Ce-lebris est historia apud Jo. Wierum, l. 3. de præstigiis dæmonum, c. 3. cujusdam hydropici, cui cum pulvis Bufonis in olla usti, ab uxore mala offeretur, copioso reddito lotio, & ventre ab aquâ exonerato per vesicam, convaluit: unde insigne diureticum audit. In peste Anglicâ Londinensi an. 1665. pulverem Bufonem exsiccatorum ad 5ß. exhibitum, summè proficuum experti sunt medici sæpius repetitum, sudori semper adjuncto.” *Hoffm. in Schrod. Mang.* p. 591. *N. B.* “It was first introduced into medicine upon occasion of a cure performed on a hydropic person; who, having taken powdered toads in order to dispatch himself, voided a large quantity of urine, and soon after recovered of his disorder.” *New Disp.* p. 109. Wierus's story is related by several others; perhaps all from him; though not very credible. The author seems to have seen some faulty *M.S.* taken from my lectures: for I observe several things in him which he could have no where else. Vid. *River.* l. xi. c. 6. p. 331; “*Jo. Wierus de præstigiis dæmonum & incantationibus ac veneficiis, lib. v. Basilæ 1684. 8vo.*” *Lind. renov.* 702; & “*Reinerus Solenander consiliorum medicinalium, sect. v. Francof. 1596. fol. quarum prima ante annos 38. edita Lugduni cum consiliis Jo. Montani in 16.*” *Ibid.* p. 984. I find nothing of the use of the pulvis Bufonum in *Sydenham*. However—4. Toads are commended many ways. Bates says of his pulvis Æthiopicus, made of toads burnt alive, (horrid!) “Dosis 5ß. vel ultra, in variolis, &c. vel in moribundis auxilio certe fuit.” *Oleum Bufonum* is said to be good

for the dropſy and ſcrophula outwardly; ſp. vini, or wine in which ſome Toads have been drowned, to be an egregium & expertiſſimum alexipharmacum, inwardly; wonderful amulets to be made of the creature itſelf; and what not. Our *Pharm.* edit. 1735. adopted *Bates's pulvis Æthiopicus*, by the name of *Bufo præparatus*, which is retained in the edition 1744. All the favour I aſk for theſe innocent (though not very lovely) animals is to kill them before they are burnt; a favour never denied to the greateſt criminals; for I can aſſure you the powder will be nothing the worſe for it. But now poor Bufo is diſmiſſed ſafe.

“ *Paucum venenum habere Buſones & mite ſcripſit Albertus.*” *Ionſ. Quad.* p. 133. “ Bufo vivus aſſumptus, vel ſaliva, urina, aut ſanguis ejus, inferunt ſymptomata lethalia; exenteratus, ſiccatus, vel calcinatus, diureticum præbet validiſſimum, conducens ad hydropem; vi etiam pollet alexipharmaca & ſudorifera, prodeſtque in morbis malignis. Doſis eſt ad ʒj. Externè adhibetur in amuletis contra peſtem, & applicatur renibus ad promovendam urinam, item capiti, ad dolorem ejus chronicum, & maniam. Oleum ejus per coctionem medetur ſtrumis: cinis ejus fiſtulas ſanat, & ulcera fordida.” *Nucl. Belg.* 50. *Verbo*, its diuretic virtue ſeems to be founded on a fable; its alexipharmic on its ſuppoſed virulency; and any real effects it has on apprehenſion. Is not a burnt mouſe as good as a burnt Toad? *Vid.* Arſenicum & Hermodact. for amulets.

C A N T H A R I D E S.

S E C T. I.

Cantharides offic. *Cantharis major*, *Ionſ. Inſect.* p. 76. *Aldrov. Inſect.* 476. *Cantharides*, *Mouſ. Inſect.* 144. *Cantharis Dioſcoridis*, *Charlet. Inſect.* 47. *Cantharides vulgares officinarum*, *R. Hiſt. Inſect.* 101. *Spaniſh Flies*—are of a ſhining green colour, or greeniſh-gold colour, about nine lines long, and two broad, in the body; of little taſte at firſt, afterwards acrid and cauſtic; and of a fetid ſmell while recent.

“ *Sunt animalia oblonga, alata, parva, vaginipennia, aureo colore viridantia; ſaporis primo nullius, hinc acerrimi, picei, cauſtici, erodentis; odoris cum recentes ſunt foetidiffimi. Inveniuntur maxime in regionibus calidioribus, Hiſpania, Gallia, etiam in Germania ſuper cynogloſſam . . . ut plurimum gaudent fraxino, ut & liguſtro.*” *Herm. Cyn. par.* ii. p. 55.

They are common in France, Spain, Italy, &c. found on corns, roſes, aſh-trees, &c. They ought to be well dried, intire, as little broken or duſty as poſſible, that is as recent as may be. “ *Perimuntur aceti acerrimi vapore, qui dum fervet exhalat. Hinc ſiccantur, & ſervantur per biennium.*” *Schrod.* 865.

“ *Cantharides quæ in frumentis leguntur, ad recondendum idoneæ ſunt. Eas in vas, non piceatum immittito, ac ipſius oſculum raro puroque linteo obligatum, circumvertito ad vaporem ferventis aceti quam acerrimi, tandiuque inverſum fiſtile contineto, donec illæ ſuffocentur, tum lino tranſfixas reponito. Porro efficaciſſimæ ſunt quæ variæ viſuntur, luteæſque habent in*

"pennis transversas lineas, quæque oblongo sunt corpore, crassæ, & blattarum modo, præpingues, sed inefficaces & imbecillæ quæ unius sunt coloris." *Dioscor.* l. 2. c. 65. p. 102. "Simili modo reponuntur & buprestes è cantharidum genere, & pityocampæ. . . Vis ipsarum, communis septica, exulceratoria & excalfactoria qua de causa medicamentis admiscuntur, quibus carcinomata, lepræ & impetigines feræ curantur. Menses quoque cient, pessis emollientibus additæ. Porro nonnulli cantharidas antidotis admistas, etiam hydropicis auxiliari prodiderunt, quippe quæ urinas moveant. Alii ipsarum alas & pedes, iis quæ illas hauserunt pro antidoto esse tradiderunt." *Diosc.* l. 2. c. 66. p. 102. "Est & cantharis dictus scarabæus parvus, frumenta erodens." *Plin.* l. 18. c. 17. p. 462. "Theophrastus quidem, hist. l. 8. c. 10. in tritico nasci cantharidem scribit, sed nusquam a cantharide triticum erodi." *Dal. in Plin.* p. 464.

S E C T. II.

They are caustic, or rather septic, diuretic and menagogue; called aphroditic; and commended inwardly in the dropsy, gonorrhœa, jaundice, obstinate female obstructions, &c. But more used, as well as more safe, outwardly as a vesicatory.

"Calidæ sunt & siccæ sat validæ, adeoque corrosivæ, seu vesicatoriæ, diureticæ, emmenagogæ. Hinc usus creberrimi in vesicatoriis. Internus earum usus rarissimus est, quippe inter venena vulgò recensentur: vesicæ nimirum urinariæ adeo infensæ sunt, ut vel extrinsecus cuti alligatæ eam exulcerent. Sunt nihilominus audaculi qui diureticis eas admiscunt. Sunt & improba scorta, quæ foetum tenellum iis perimunt, & exturbant. N. 1. Recentiores alas, pedes, & capita rescant, solo corpore servato. N. 2. Galeus alas & pedes exhibet pro antidoto veneni proprii. N. 3. Oleum cantharidum & cantarellorum elicitur per sp. vini, prodestque ad calculum." *Schrod.* p. 865.

1. Their acrimony and inflaming and septic quality are sufficiently evident by their effects on the skin. "Sunt odoris foetidi, & saporis acerrimi." *Nucl. Belg.* p. 58. vide *Herman supra*. — 2. They affect, even outwardly applied, more the urinary passages, especially the bladder, than any other part, except that part of the skin they are applied to. It is well known how commonly blistering plaisters cause heat of urine and a strangury. *Langius, Paschalius*, (quoted by *Sennertus, præf.* l. 6. par. 8. c. 26.) and *Wedelius (Amæn. M. M.* l. 2. f. 2. c. 5. p. 342. although some years before he had not an instance of it, as appears by his treatise *De Med. Facult.* l. 1. f. 2. c. 6. p. 58.) Also observe, that a mictus sanguineus sometimes follows a blister made with Cantharides: of which I knew an instance. This may be called a specific quality properly enough. But—3. (α) Where this acrimony is lodged has long been disputed by physicians; that is, whether there was less danger in giving all the insect, or in giving only the (belly, or) body, without head, feet, and wings. It was an old opinion, as appears by *Dioscorides, Galen, (Simpl.* l. 11. fol. 82. E. & *De Antidot.* l. 2. c. 7. fol. 114. D.) *Plinius*, (l. 11. c. 35. p. 278.) *Aëtius*, (*Serm.* 13. c. 49. p. 640.) that the virus of Cantharides was in their bodies; and

and that the head, feet, and wings, contained its antidote: although Hippocrates, and all the Arabians except Avicenna, (whom many moderns follow) seem to have been of another mind. For Hippocrates, in many places, orders the bodies to be taken; the head, wings, and feet being separated, or thrown away; and that as well when they are taken inwardly, as when outwardly applied. “Hoc secundam educit, menses deturbat, & fœtum imperfectum extrahit. Cantharidas quinque alis, cruribus & capite avulsis . . . hæc omnia ex vino dulci diluto permixta, cum primum dolor detinuerit, potui exhibenda.” *Hippoc. De Morb. Mul.* l. i. *Ed. Fæf.* p. 625. lin. 52. and p. 624. lin. 43. The same things are ordered pro subditio. vide *Hippoc. Ed. Lindenii*, ii. p. 497. § 106. No. 6. and p. 500. No. 30. where he omits to translate the *potio*, having turned, in the first-cited place, the *subditium* into *bibenda dato*: but 513. § 122. the same prescription is repeated, and translated by him. *Hæc autem obiter.* (β) Again, some attribute their acrimony to their volatile salt, or acrid oil; others to their bristles, or spinæ, with which, as so many stings of nettles, their bodies and legs are covered. “Olaus Borrichius obtinuit ex cantharidum ʒj, per retortam destillata, olei crassi plus ʒj; aquæ flavæ exiguiſſimam portiunculam; & salis vol. urinofi ʒβ. circiter. Et postquam vidisset manum hominis perfrictam oleo & sale volatile hisce, nil vesicularum sentire; & microscopii ope, in corpore cantharidum atque pedibus, mille spinis inhorrescere, harum aculeis cuticulæ impactis, tribuit vim adurentem; quemadmodum a foliis urticæ, ut quæ similibus spinis armantur, manus patitur eundem adustionis quasi effectum. Hinc concludit, non in alis, nec in capite, vim causticam residere, sed in corpore reliquo solum atque pedibus. . . Interim tamen non alienum putat existimare, vim cuspidum, a sale volatili eorundem increſcere, atque auctiorem reddi.” Vide *Acta Haf.* vol. iv. obs. 80. and vol. v. obs. 89. and *Rieger, Introd.* ii. p. 480. But (γ) Since the infusions and tinctures partake of the same acrimony, or septic quality of the flies, however filtered, (and calx viva, when neither salt nor oil can be drawn, is caustic) we need have no recourse either to the prickles or chymical principles of Cantharides to account for their virtues; and it is now generally owned that all the parts of this insect are of the same nature; which is easily destroyed by fire. — 4. There are related by Baglivi, and from him by Rieger, *Introd.* ii. 483. several experiments made on dogs, and human blood, with these flies; how accurately I know not.

(α) “Tinctura Cantharidum (ex Canth. pulv. ʒij. in aquæ card. ben. ʒvj. per tres dies digestis) ʒij. in dextram canis jugularem iniecit Baglivius; statim vomuit, cecidit humi, aquæ circiter lbxij. bibit, minxit, quarta die noctu, post maximos ululatus expiravit. Collum ex ea parte qua experimentum tentavimus, sphacelatum omnino erat, & fœtidum. In corde sanguis nigerrimus parum vel nihil coagulatus. Viscera omnia sana; in vesica urinaria minima mucositatis portio, qua naturaliter oblinitur, inventa est.

(β) Canis alter eodem modo tractatus, statim vomuit, cecidit semimortuus. sitiebat, sed nihil aquæ datum, post sex horas moriebatur. Aperto cadavere (fere ut prioris).—In ambobus caput primo inficiebatur. (γ) Cantharidum pulv. ʒj. sanguinis recens extracti ʒiv. mistus, coagulabatur sanguis citius quam alia ejusdem portia ʒiv. sine pulvere: postea colore plumbeo & subnigro tingebatur: & tandem subtilis pellicula subnigra in superficie apparuit.

“ apparuit. Demum per totam sanguinis superficiem, maxima vesicularum
 “ copia supercrevit, quæ ruptæ, subnigrum serum emittebant. Demum totus
 “ sanguis dissolutus est in serum nigrum ac sublividum. Alia sanguinis por-
 “ tio, hujusmodi mutationibus non fuit obnoxia. (d) Canth. pulv. ʒj. cum
 “ sero sanguinis febricitantis mistus, in fundum præcipitavit, nec ullo modo
 “ serum tinxit; solummodo evasit liquidius, tenuius, & vix coagulabile.
 “ Hactenus Baglivus.” *Rieger. Introd.* ii. 483. — 5. Taken inwardly they
 provoke urine and the menses, inflame, ulcerate, &c. and in too liberal a dose
 cause deliriums, lipothymies, death, affecting still principally the urinary pass-
 ages, then the intestines, head, and heart. “ Quibus exhibitæ sunt Cantha-
 “ rides signa eveniunt gravissima: propemodum enim ab ore ad vesicam usque
 “ iis omnia erodi videntur, pici aut cedriæ simile quiddam in gustu observatur:
 “ in dextro hypochondrio inflammationem sentiunt, & urinam ægre reddunt,
 “ ac subinde cum lotio sanguinem emittunt: strigmenta, qualia dysentericis,
 “ per alvum egeruntur: animi defectionibus, fastidiis, & tenebrosa vertigine
 “ corripuntur: tandem vero etiam mente alienantur.” *Dioscor. Alexiph.* c. 1.
 p. 402. Yet we find *Hippocrates* (in his genuine works, as well as in some
 of the suspected books) frequently orders them inwardly, as in a dropsy, No. iii.
 (*De Vi&tu acut.* p. 406. l. 27.) in the jaundice, No. iv. (*De Intern. Affect.*
 p. 552. l. 25.) twice or thrice a day: ad excitandum fluxum menstruum,
 No. iv. (*De Nat. Mul.* p. 565. l. 52.) &c. and always the bodies only.
 Though the good old man was not ignorant of their acrimony, yet it does not
 appear he used them for blistering. “ Subdititia medicamenta acria sanguinem
 “ ducentia. Cantharidas quinque exceptis pedibus & capite, myrrham & thus,
 “ commisceto, &c.” *De Morb. Mul.* l. 1. p. 620. l. 44. And he adds:
 “ Ubi morsum senserit detrahendum.” p. 632. l. 4—14. where the strangury
 is taken notice of. Whether Aretæus or Archigenes was the first, it is cer-
 tain that both used Cantharides for blistering (vide *Le Clerc's Hist.* p. 513.)
 or as a metasyncritic remedy.

That Cantharides may be of use in dropsies, and some female diseases, as
 they stimulate, as it were specifically, the meatus urinarios & vicina; in go-
 norrhœas, as they render the urine more acrid, and detergent, and, as it were,
 an aqua phagedænica, to clean any sores in its passages; and in the jaundice,
 as, on the same account, they attenuate; is pretty evident: but I think it a
 dangerous remedy, and ought to be used cautiously; and not to be ventured
 on in the gravel or stone; though several authors recommend it in these dis-
 eases.

But outwardly, as a vesicatory, Cantharides afford a divine remedy in many
 deplorable diseases, acute as well as chronical: and the strangury they occasion
 commonly soon yields to soft, somewhat oily, and mucilaginous liquids, taken
 in sufficient quantity; as milk and water, emulsions with gum Arabic in them,
 decoctions of the emollients, &c. But nitre, recommended in the *New Disp.*
 p. 106. being resolvent, yea mildly erosive, by carrying off the natural mucus,
 will prove a bad corrector, in my opinion. Vide *Hoffm.* and *Herm. Obs. Ibid.*
 p. 105, 106. These diluents also, after vomiting, are the best remedies for
 the symptoms which these flies taken inwardly may occasion. That camphire
 inwardly used is of any use here may be doubted: but that mixed with the
 plaister it will prevent the strangury, I cannot believe.

“ Dr.

“ Dr. *Groenvelt*, who published, in vindication of his own practice, a small treatise *De tuto Cantharidum usu interno*, suffered much by a prosecution for giving them inwardly, being charged with and sued for mal-practice. The issue ruined the unhappy doctor, and taught his envious prosecutors the safety and value of his practice. They are now frequently in extemporaneous prescriptions, &c.” *Quincy’s Pharm.* p. 152. This treatise was published at London in 1698, in 12mo, and translated into English, with additions, by John Martyn, chirurgeon, with the approbation of Dr. Greenfield (*Groenvelt*) its author, at London, in 1706, in 8vo; a not very judicious performance; and an indifferent translation, or rather quack bill; though the doctor was indeed badly treated.

S E C T. III.

They may be given in infusion or tincture to gr. ij. or gr. iij; beginning with the infusion of gr.ß. The tinctura Cantharidum contains the tincture of Cantharid. gr. vj. in every ounce; and so may be given to ʒij. or iv. beginning with ʒj. They are the basis of the unguentum epispasticum, & empl. epispasticum utrumque.

These flies are very light, and of very unequal size, the biggest seldom being a grain in weight. They yield their virtue to water, wine, brandy, and rectif. sp. vini equally: though I would prefer Rhenish wine or brandy to rectified spirit, as less heating, and therefore a properer menstruum. Camphor rather increases than abates the acrimony of the tincture.

“ Tho. Bartholinus, *cent. 5. hist. 82.* sequentem infusionem commendat in gonorrhœa virulenta, lotii suppressione, & calculo. R. Canthar. pulv. ʒj. infunde in vini Rhenani ʒij. vel sp. vini stentque in infusione per aliquot dies, deinde per chartam bibulam filtrentur. Excolato liquore cochl. 1. (which contains near gr. vij.) septem aliis cochlearibus, seu vini, seu cervisiæ admisce. Ex hoc mixto primo die unum, altera duo cochlearia, & sic deinceps propinetur. N. B. Si pollex pedis dextri in oleo ungatur, in quo Cantharides sunt dissolutæ, mirabilem facit erectionem verulamii.” *Hoffm. in Schrod. Mang.* p. 643. Will they dissolve in oil? However, this is certainly an idle whim.

“ Vis caustica consistit in sale, infusa enim fiunt caustica, ex vino, & spiritu vini, sed simplici tantum non rectificato, & s. q. Cantharidum. Hinc forte cujusdam error, qui sumsit forsitan rectificatum spiritum vini, vel quantitatem Cantharidum non satis largam, ut scripserit infusa ipsorum non satis esse caustica. Harum vim non ab imaginariis illis aculeis, sed ab igneis seu salinis particulis acerrimis, dependere evincunt tum autopsia, tum experientia, a Segero aliisque tradita.” *Herm. Cyn.* ii. p. 55.

“ Absque summa necessitate vix dantur interne; nam comperi vel quartam grani partem aliquando renes inflammasse, unde diureses copiosæ, dolorificæ, imo cruentæ.” *Ibid.* p. 56.

“ Tinctura Cantharidum. R. Canthar. contus. ʒij. Coccinella ʒß. sp. vini tenuioris lbß. Digere & cola per chartam.” *Ph. Lond.* p. 87. vid. *Pemb.* p. 270. “ R. Canthar. ʒij. sp. vin. rectif. lbß. digere per biduum, & tinct. colatæ

“colatæ adde balſ. cobiabæ ʒiſſ. Cochineſ. ʒj. Digere in B. A. per quatuor
 “dies & cola.” *Pb. Edinb.* (edit. 1756.) p. 52.

COCHINELLA.

S E C T. I.

Cochinella, Coccinella, *offic.* Ficus Indicæ, grana, *B. P.* 458. Cochineſ. ſive Ficus Indicæ grana, *Park.* 1498. Cochinillæ, *R. H.* 1465. Scarabæolus hæmiſphericus Cochineelifer, *Gaz. Pet.* l. 1. f. 5. *Sloan. H. Jam.* ii. 208. Cochineal, *Phil. Tranſ.* N^o. 176 and 193. Cochinilla and Coccinilla *offic.* *Dale* 359. Cochineal—is the dried body of an inſect, about the bigneſs of hempſeed, roundiſh, convex on one ſide, plain or ſomewhat concave on the other, wrinkled all over, or ridged as it were, of a blackiſh colour, but duſted with a grey farina, on the outſide, and purple within; of a warm, bitter, not unpleaſant taſte, and ſomewhat aromatic ſmell.

It comes from Spaniſh America in the galeons which bring the treaſures of Mexico and Peru to Old Spain. Whatever ſome authors may have imagined, it is now certain that Cochineal is an inſect, which lives on a ſpecies of the *Opuntia*, which is the

Opuntia major validiſſimis ſpinis munita, *T.* 239. *O. major*, folio oblongo rotundo, ſpinis longis & validiſſimis, confertim naſcentibus obſito, flore luteo, *Sloan. Cat.* 193. *Hiſt.* ii. 149. *Tuna major ſpinis validis, flaveſcentibus, flore gilvo*, *H. Eltb.* 396. *Coctus compreſſus, articulatus, ramoſus, articulis ovato-oblongis, ſpinis ſubulatis.* *H. Cliff.* 183. The prickly Pear-tree *Sloano*, or Cöchineal *Opuntia*.

This is the plant on which the Cochineal breeds and lives, as *Mr. Geofrey* obſerves (*Mem. Acad.* 1714.) and as *Dr. Howſton* firſt told me: which *Dr. Moultrie*, who brought me the plant from America, with ſome of the inſects on it, has fully confirmed. Though they were all dead before it came to my hand, yet a great part of it was covered with a white ſilky down, in which, he ſaid, they hatch. *Mr. Miller*, however, ſeems to have underſtood *Dr. Howſton* otherwiſe than I did. “The *Opuntia folio oblongo, media*, “*Tourn.* is what the late *Dr. Houſtown* brought from La Vera Cruz with “the inſects upon it.” *M. Diſt.* ii. *Art. Opuntia.* So that *Plukenet*, (*Pbyt.* 281.) *Dillenius* (*H. Eltb.* p. 399.) and *Dale*, p. 292. were miſtaken: as were ſeveral others named by *Dale*.

“This precious inſect is almoſt of the ſhape of a large bug: its head is not
 “to be diſtinguiſhed from the reſt of its body, but by two ſmall eyes there,
 “and a very little mouth: the under part of its belly is furniſhed with ſix feet:
 “its back is covered with two little wings, ſo very fine and delicate that it
 “cannot raiſe itſelf with them into the air; and ſerve only to ſuſtain it ſome
 “moments, when forced out of the fruit that nourisheth it, when to be ga-
 “thered. The wings, feet, and extremities of the head, are ſo delicate, that,
 “being eaſily conſumed by the heat of the ſun, the inſect, this winged worm,
 “retains no more the figure of an animal, appearing only, when dried, like
 “a ſeed of a moderate bigneſs, brown and almoſt black (*chagrinée*) ſhining,
 “and

“ and as it were silvered, or at least slightly covered with a very fine impalpable white dust, all over adhering to its skin. . . The best way to make these insects die, when they are fallen on the cloths, is to sprinkle them with cold water, and then leave them to dry.” *Sav. Diēt.* iii. 105. “ Imported from Cadiz of Cochenille to Marseilles, between 20 and 30000lb. weight annually, valued from eight to twenty-four livres per pound, an. 1688: it sold at sixteen livres per lb. in 1727, at thirty-three livres the pound, garbled.” *Sav. Diēt.* iii. 455, and 611.

In *Mangeri Bib. Pharm.* vol. i. p. 600. are the accounts which De Laet, Herman, Ray, D. Rochefort, Lister, Dale, Lewenhoek, Pomet, give of Cochineal. Lewenhoek at first took it for a seed, but afterward discovered his error. The name seems to come from coccus, quasi coccinula; it being much smaller than kermes. Cochineal, No. xv. weigh but gr. iij.

S E C T. II.

It is antacid, and probably diaphoretic; called cordial and alexipharmic; and commended in intermitting and malignant fevers, epilepsy, stone, also in fluxes, and to prevent abortion: it agrees in many things with kermes.

“ Cardiacum insigne habetur, sudorificum, alexipharmacum & antefebrole medicamentum, febres omnes quantumvis malignas sanans; ideoque in peste, & febribus petechialibus sæpius exhibetur.” *Dale*, p. 359. “ Imo antiepilepticum fuit insigne *D. Stephani le Clerc, M. D. Genevensis*. Ille præmissis universalibus, Cochinillæ pul. gr. iv. ex aquis appropriatis, per tres ultimos lunæ dies, mane jejuno ventriculo exhibebat; hocque simplici medicamento plures a sævissimo morbo liberabat.” *Bib. Pharm.* i. 603.

1. It is bitter, but not disagreeably so, and somewhat aromatic as we commonly get it. “ Saporis sunt acris, salivam sanguineo tingentia colore.” *Nucl. Belg.* p. 83. It is very much used in dying. — 2. The fruit of the *Opuntia*, on which it feeds, abounds with a deep blood-red pulp, and tinctures the urine of such as eat it so as to make them sometimes imagine that they piss blood. Vide *Mr. Geoffroy. Mem. Acad.* 1714. “ Fructus pulpâ sanguineo colore manus tingente infectâ, gustu subdulci, aliquot comesti, rubro sanguineo colore urinam tingunt, ut admirationi sit.” *R. H.* 1464. — 3. Cochineal, by a chemical analysis, yields the same principles with other animal substances, viz. phlegm, of the same smell with that from C. C. spirit; and volatile salt, very near in the same proportion with hoglice; and a pretty thick, deep, red, foetid oil. *Geoff.* l. c. — 4. It is more used for its tincture, or colour, than virtues. *Quincy, Pharm.* p. 163, says: “ In some robust constitutions, that can dispense with large doses, it will sometimes cure agues, after three or four times taking: but it is not very safe; for, if it does not raise a sweat, it makes the patient hot and restless.” I own I suspect it as much as the kermes; though in the quantity it is given it can do little prejudice; and most probably as little good, as a cordial. I am not for increasing the dose. Vide *N. Disp.* p. 116.

“ Deprædicantur habere vim insignem cardiacam, alexipharmacam, & anti-febrilem; diuresim movent, valent in calculo, gonorrhœa, & similibus; præscribuntur contra fluxum ventris & abortum; de cætero fere conveniunt

"cum millepedibus." *Nucl. Belg.* p. 83. I would try them in the epilepsy sooner than in any other disease in which they are recommended, and that *Dr. Le Clerc's* way too.

S E C T. III.

The dose is from two to six or eight grains. *Quincy, Le Clerc*, gave only gr. iv. in the epilepsy. They are used in the spiritus lavendulæ compositus, tinctura Cantharidum, tinct. hellebori nigri, tinct. ipecacuanhæ, tinct. rhabarbari, tinct. rhei amara, tinct. sacra, tinct. serpentariæ compos. tinct. sudorifica, (nimis larga dosi), vinum chalybeatum, decoctum nitrosum, decoct. serpentariæ compositum, pulv. contrayervæ comp. confectio alkermes, (quæ ingreditur elect. cardiac.) so perhaps too much. "I have no reason to believe these insects to be possessed of any considerable medicinal virtues." *James's Ph.* p. 503. "Cochineal has been strongly recommended as a sudorific, cardiac, and alexipharmic; but practitioners have never observed any considerable effects from it." *N. Disp.* p. 116.

H I R U D O.

S E C T. I.

Hirudo, Sanguisuga, offic. Hirudo alia parvis tuberculis nonnihil aspera, medicinalis, *R. Hist. Insect.* p. 3. The Leech, or Loch-leech, which is used in Britain, differs from the Hirudo, (*maximè apud nos vulgaris*). The Horse-leech, or Blood-sucker, *R. Hist. Inf.* p. 3. seems to be most esteemed in foreign countries; and is the Hirudo, Sanguisuga offic. *Dale*, p. 353. Following Schroder here we shun the Horse-leech. See the difference in *Ray's Hist. Insectorum*.

"Hirudo alia, parvis tuberculis nonnihil aspera medicinalis. Medium dorsum ex viride nigrum est; dein linea utrinque rubescens; inferius duæ aliæ latiores lineæ, sed nigris majoribus maculis intermixtis: venter magis nigricat, maculis viridescentibus. Hæc est qua medici utuntur, ad sanguinem exsugendum. In fundo oris tres magnæ, acutæ, latæ, & albæ carunculæ dentium instar, sed molles, nascuntur. Mirum quomodo cutem perforant, cum nihil durum aut osseum appareat. Caruncula dentiformes in hac multo majores sunt, quam in priore. Vulnus quod. infligunt triquetrum est, dentibus in unum concurrentibus." *R. H. Insect.* p. 3.

They live in running as well as standing waters; are kept in bottles, not quite full nor close stoppt, in water, which is to be changed every two or three days; and soft rather than hard water; with which some mix a little sugar. Hirudo, Græcè βδελλα à βδάλω, fugo, mutata α in ε.

S E C T. II.

They are used only alive to draw blood, in order to diminish its quantity, or some way alter its course. "Ufus

“ *Ufus.* Sanguinis exsuctioni inserviunt, adeoque cum cucurbitulis conveniunt. *N.* antequam applicentur, servanda sunt in aqua pura, ut probe purgentur; hinc loco applicationis sale nitri fricato, sanguineque vel argilla inuncto applicanda. Cum amoveri vis, insperge parum salis, aut cineris, aut lini combusti.” *Schrod.* 867. The very learned *Heister*, in his *Institut. Chirurg.* has a chapter *De Sanguisugis*, (where however there is but a bad figure of one). I shall therefore only take notice of a few things concerning them, which are not so fully handled there as to me appears necessary.

Leeches cause pain, making gradually a pretty large three-cornered wound, perforating arteries as well as veins, if within their reach; whence sometimes mortal hæmorrhages have ensued: sometimes they will not fix on the designed part; at other times they suck till they burst, and will not come off even then; &c. Wherefore a safe place being pitched on, 1. to make them fix, the part must be rubbed till it be warm enough, or a little red; if that do not, anoint it with a little sweet cream, or fresh blood (of a pigeon or hen, *Heister.*) taken from ones finger. 2. To make them fall off, throw common salt on them, which never fails. 3. Hence if a leech by accident be swallowed; or, applied to the hæmorrhoid veins, get into the rectum, which is said sometimes to have happened; warm salted water drunk, or injected, will procure their expulsion. *Vide Dioscor. Alexiph.* c. 32. p. 413. And 4. To stop the hæmorrhage, if the common methods succeed not, as sometimes happens from the deepness of the wound, a proper actual cautery will seldom fail: if it does, the vessel must be stitched. “ *Crediderim Hirudines contusas & podagricis applicatas esse narcotici loco. Eadem ratione & cochleæ domiportæ & limaces prodesse possunt. Narcotica enim sunt omnia illa animalia.*” *Hoffm.* p. 515.

L I M A C E S.

S E C T. I.

Limaces terrestres, cochleæ terrestres, offic. “ (*Cochlea cinerea maxima edulis; cujus os operculo crasso, velut gypseo, per hyemem clauditur.*” *List. Animal. Angl.* iii. “ *Cochlea terrestris, Limax terrestris. offic.* The Snail, *Dale* 362. “ In meridionali Angliæ parte frequens. . . Verum quoniam hoc genus *Cochleæ* minus frequens, nec ubique obvium est, officinæ nostræ ejus loco *Cochlea* vulgari utuntur.” *Dale Ib.*) *Cochlea* vulgaris, major, pulla, maculata & faciata, hortensis. *List. H. Anim. Angliæ*, p. 113—116. The common Garden Shell-Snails.

These are common enough in our gardens. All Snails, as well as Leeches, are hermaphrodites, yet copulate, (vid. *Lister*, l. c.) and seem to be panphaga. I have seen them eat the leaves of artichokes, wild cucumber, henbane, tobacco, &c. “ *Olera depascunt, & omnigenam herbam.*” *Lister.* l. c.

S E C T. II.

They are antacid and nourishing; called pectoral; and commended internally for weak children, coughs, consumptions, &c. and externally for pains, tumors, ulcers, &c.

“ *Officin. nat.* Cochleæ integræ, testæ, pinguedo, mucus. 1. Cochleæ refrigerant, incrassant, consolidant, leniunt, nervis conveniunt, ac pulmonibus. Hinc *usus præcipui* interne, ad tussim, phthisin, screeationem sanguinolentam, aliosque pulmonum affectus; hinc ad epatis calorem, & colicum dolorem. Externe maturant ac rumpunt anthraces, consolidant vulnera, præcipue nervorum, ulcera sanant, inflammationes (podagricas) mitigant, ventrem hydropicorum, hydroceleque detumescere faciunt, hæmorrhagiam cohibent (fronti applicatæ). Spuma e Cochleis sine aqua igni appositis fistulas domare dicitur. 2. Testæ tritæ exhibentur calculosis, rimas manuum siccant & consolidant. 3. Pinguedo (in elixato brodio, ubi id refrixerit, supernatans) oculorum rubedini doloribusque medetur, defluxiones ad oculos intercipit (fronti cum albo ovi imposita). 4. Mucus salivofus (quem compunctæ Cochleæ reddunt) emplasticus est, ideoque glutinans, defluxionesque ad oculos intercipiens, (in anacollematis). *Præp.* 1. Aqua stillat. 2. Cinis. 3. Liquor Limacum.” *Schrod.* 807.

They are not acrid, but abound with a viscous juice: they feed on vegetables only. “Succum continent lentum, unde difficilis sunt digestionis.” *Nucl. Belg.* p. 177. “Cochlea terrestris stomacho utilis est, & ægre corrumpitur.” &c. *Dioscor.* l. 2. c. 11. p. 91. Snail-milk is often given to weak and tender children. Black Snails, without shells, are commended (by our highlanders) for fixed pains and swellings of the joints, beat into a cataplasm. The shells are absorbent.

L U M B R I C I.

S E C T. I.

Lumbrici terrestres, Vermes terrestres, *offic.* Lumbricus terrestris, *Aldrov. Insect.* 693. *Ionf. Insect.* 137. *Charlet. Inf.* 59. *R. Hist. Inf.* p. 1. Vermes terrestres majores. *Mer. pin.* 206. Earth-worms.

They much resemble the Lumbrici teretes intestinorum, yet are evidently specifically different, as appears by their anatomy, (vide *Willis de Anima Brutorum*, c. 3.) compared with that of the teretes intestinorum, (vide etiam *Clerici Historia Lumbricorum*, p. 218). This crawling contemned insect has neither eyes, ears, feet, bones, nor brains; yet seems able to distinguish between day and night, dry and moist weather, and to eat its way through very hard earth, and even know whatever is necessary for the preservation and propagation of the species. They feed on the juices of the earth only.

To preserve them, the largest and fattest ought to be slit up, well washed, and then dried.

S E C T. II.

They are nourishing and antacid; called diuretic, deobstruent, and anodyne; and commended inwardly in the jaundice, dropsy, colic, spasms, convulsions, apoplexy, palsy, scurvy, rheumatism, gout, gravel, worms, &c. and outwardly as discutient and anodyne. Rari sunt usus: forsan nullius.

“ Lumbrici

“ Lumbrici terreni sunt insigniter diuretici, diaphoretici, anodynī; discutiunt, emolliunt, obstructions referant, lac augment, vulnera nervosque præcisos glutinant. *Usus præcipui* sunt in apoplexia, spasmo (ex signatura) aliisque affectibus nervorum, ac musculorum; in ictero (utroque) hydropē, vermiculatione infantum, dolore colico. Imprimis autem specificè profunt in arthritide illa scorbutica quam vagam appellant. Intus exhibentur vel toti conquassati, recenterque v. g. cum vino trajecti per linteam; vel siccati & pulverisati. Extus applicantur vivi & mortui: vivi impositi, donec moriantur, profunt panaritiō; mortui in cataplasmatibus fere adhibentur. Odontalgia convenire dicitur cinis (cavitati dentium inditus): podagricos dolores leniunt (pulvis cum farina calide impositus). *Præp.* 1. Aqua. 2. Oleum coctum. 3. Liquor. 4. Pulvis.” *Schrod.* p. 868.

They are no ways acrid, feed on the earth, are eaten by many animals, and yield the same principles with other animal substances: they contain also a viscid juice, with which they are commonly besmeared; so agree much with snails. “ In vitro putrefacti, & per se destillati, suggerunt spiritum urinosum, sal volatile, & oleum fœtidum.” *Albin. MS.* Without putrefaction it requires a much greater heat than that of boiling water to raise a volatile salt from them: so the aqua Lumbricorum is nothing but water, more putrescent than common water.

“ The aqua Lumbricorum magistralis is a very good medicine in inflammations and tubercles of the lungs. . . They are seldom omitted in the occasional prescriptions of snail-waters, and make a very good ingredient therein, having much more in them that will rise in the still than snails, as we shall see in the following parts.” *Quincy’s Pharm.* p. 140. “ For most that can be supposed to rise from such ingredients (aq. limacum) is a nitrous salt, wrapt up in soft mucilaginous parts.” *Ib.* p. 344. *Rare chymistry!* Aqua Lumbricorum was omitted in the *Pharm. Lond. Edit.* 1721. but aqua Limacum utraque retained. In the *Edit.* 1746. these were thrown out also, and the former with it. What better is oleum Lumbricorum than an axunge, or oil? or axunge and oil mixed? Is it ever used? You may eat them by ounces, *si placet.*

“ Terreni vermes (*γῆς ἐντέρες*) triti & impositi, præcisos nervos glutinant, ac tertianas quoque solvunt. Decocti vero cum anserino adipe, & instillati, affectis auribus medentur. In oleo autem decocti, si oppositæ auriculæ infundantur, dentium doloribus præstant auxilium. Triti quoque & cum passō e poti urinas ciunt.” *Dioscor.* l. 2. c. 72.

S C I N C U S.

S E C T. I.

Scincus, Scincus marinus, *offic.* Scincus, *Aldrov. Quad. Ovip.* 658. *Ionf. Quad.* 138. *Bellen. de Aquat.* 47. Scincus, seu Crocodilus terrestris, *Worm. Mus.* 315. *R. Synop. Quad.* 271. Scincus quem & Crocodilum terrestrem vocant, *Gesn. Quad. Ovip.* 24. The Scink.—This is a little four-footed animal, about the bigness of a small lizard, covered with whitish shining scales,

with a round tail, long and sharp snout, and five long toes in each foot; found about the Red-sea, on the Nile, &c. being an amphibious animal.

"In the Antilles islands, where there are many of them, they are called "*Brochet de mer*. . . All that come from Egypt want the intrails and end of the tail." *Sav. Diët.* ii. 1630. where it is called *Stinc marin*.

"*Scincus* (σκινχος) quidam in Ægypto, alius in India, alius ad Mare Rubrum gignitur. Est & alius qui apud Libyam, Mauritaniam fluvium, reperitur. Est vero *Crocodylus terrestris* sui generis, qui, addito nasturtio, sale conditur. Aiunt porro partem eam quam renes amplectitur, 3j. pondere in vino potam, venerem accendendi vim habere: attamen lentis decocto cum melle, aut semine lactucæ cum aqua potio, intensam illam Veneris cupiditatem inhiberi. In antidota quoque additur. *Dioscor.* l. 2. c. 71.

S E C T. II.

It is probably nourishing, and of easy digestion; called aphroditic and alexipharmic; and is used in the mithridatium, on account of which only it is found in our shops.

"*Officin. nat.* 1. Integri exiccati. 2. (raro) pinguedo. Alexipharmacus est *Scincus*, *Venerem* accendit. Pinguedo simili virtute pollet. Dosis 3j. *Matthiolus* commendat rostrum & pedes, eosque cum vino propinat; hinc & carnes laterum commendat. Ingreditur antidota, & præcipue theriacam *Andr. & Antidot. Matthioli.* *Schrod.* p. 871.

It is said to feed on aromatic plants: and its dung is said to be aromatic: but as we have it, it is not so. And there being only ventris *Scinci* ʒiiss. in about mithridati lbx. it could suffer nothing though *Scincus* were omitted. "Præferunt quidem tabulæ nostræ integrum animal: sed *Mithrid. Damocr.* 2. *Antid.* 2. vult ventrem 7. *Dioscorides* carnes circa renes; *Galen* 11. *Simpl.* renes ipsos commendat *Veneri* ciendæ; at *Plinius*, l. 28. c. 8. rostrum & pedes: videor mihi inde colligere, διαφωνίαν esse falsitatis notam. Ergo parum abest quo minus cum imperio facessere jubeam *Scincum* ex omnibus officinis; & alioquin venereum illud medico Christiano indignum est." *Hoffman*, p. 517. "Ego vires iis adscribere multas nequeo." *Albin. MS.*

SCORPIONES.

S E C T. I.

Scorpio, *Scorpio terrestris*, offic. *Scorpius*, *Aldrov. Insect.* 577. *R. Hist. Inf.* p. 9. *Scorpio*, *Ionf. Inf.* 95. *Worm. Mus.* 264. *Charlet. Inf.* 54. *Scorpio*, offic. *Dale* 354. The *Scorpion*—is an eight-footed land insect, with an oval body, jointed tail, armed with a sting, and of a sooty dark colour (though some are of a yellowish white), found in every warm and hot country.

They are very common in the south of France, the Canaries, Italy, Asia, Africa, America. In Germany and Switzerland there are also some *Scorpions*, but they are not reckoned hurtful. There is a very curious Memoir on

Scorpions, containing several experiments, by *Mr. Maupertuis*, *Mem. Acad.* 1731. p. 317—326. wherein several vulgar errors are corrected. He says,

“ There are two sorts of Scorpions about Montpelier; one small, and of the colour of burnt coffee, common in houses; the other lives in the fields, and is of a yellowish white colour, about two inches long. They are so plentiful about a village called Souvignargues, five leagues from Montpelier, that the peasants drive a sort of trade in them with the apothecaries of the neighbouring villages.”

(α) “ I made an irritated Scorpion sting a dog, in three or four places. (says *Mr. M.*) in that part of his belly which is freest of hair, and an hour after he swelled much, and staggered, and rendered all he had in his stomach and guts, continuing for three hours to vomit, from time to time, a sort of viscid (bave) slaver. The tension of his belly diminished after every fit of vomiting, but immediately swelled again, and so alternately for the three hours: but then convulsions seized him; he bit the earth, dragged himself along on his fore feet, and in fine died five hours after he was stung. I never observed any swellings on the part stung by Scorpions. Some days after I repeated the experiment, and caused seven or eight dogs to be stung by enraged Scorpions, brought fresh from Souvignargues, again and again, so that some had ten or twelve wounds on the same part; yet none of the dogs died, swelled, or suffered any thing but the pain of the stinging. I made Scorpions also sting three chickens under the wing, and on the breast; but none of them gave the least sign of sickness; though I made use of both male and female Scorpions, and newly taken. Hence (says he) it is not easy to determine how many circumstances must concur to render the sting of a Scorpion mortal. And this, perhaps, gave credit to some counter-poisons used in Languedoc, as the oil, in which Scorpions have been drowned, applied to the part, the Scorpion itself bruised on it, &c.” Thus *M. Maupertuis*.

(β) It is affirmed, that once a mouse, being shut up in a bottle with a Scorpion, was stung by it, and soon died; but another mouse being put into the bottle, and also wounded, she had the courage to devour the Scorpion, and the good fortune to be avenged of her enemy and cured of her wounds at the same time. This fact is looked on as certain; and the mouse as inspired by nature with the knowledge of this remedy. *Mr. Maupertuis* put a mouse and three Scorpions into a bottle: the mouse soon received several punctures, which made her cry out at first; but then, resolving to defend herself, with her teeth she killed all the three Scorpions, but did eat none of them, neither did the stings give her further trouble.

(γ) “ It is very remarkable, concerning this insect, what an ingenious gentleman, who lived several years in Barbary, told me he had several times tried, that if it be surrounded with a circle of burning coals, it does, upon the sense of the heat, turn itself violently every way to make its escape; but finding it impossible, and the pain from the fire increasing, it strikes itself twice or thrice with the sting on the back, and immediately dies of the wounds. Others may make what reflections they please on this self-murder; it is to me, beyond all dispute, sufficient to decide the controversy between writers, whether poisonous animals, of the same species, can
“ kill

“ kill each other.” *Mead of poisons*, p. 55. edit. 1702. I never saw a Scorpion alive; but by the structure of the tail, and form and situation of the sting, it seems to me not to be possible for the Scorpion to sting itself on the back. Neither does it appear probable, that upon its stinging itself it should immediately die. N. B. In the edition, 1745, of *Dr. Mead on poisons*, we have, “ The fact has since been confirmed to me by others, who have assured me “ that it is a common diversion among the soldiers at Gibraltar (where these “ creatures abound) to make this experiment. This self-murder decides the “ controversy among writers, &c.” p. 95. “ Others may, &c.” being left out; which ought never to have been inserted. But let us hear *Mr. Maupertuis*.

“ It is also reported, says he, in Languedoc, that if a Scorpion be inclosed “ within a circle of burning coals, it will sting and kill itself. I made an “ inclosure of coals, and put a Scorpion in it; which, feeling the heat, “ searched round for an’ outgate, and finding none, it traversed the coals, “ which half burnt it. I put it again into the inclosure, and, having no more “ strength to endeavour to force a passage, it soon died; but without shewing “ the least desire to make an attempt on its own life. The same experiment “ was repeated on several other Scorpions, which all acted the same way. “ The Scorpion’s posture of defence gave occasion to this story, but thus “ sting itself it cannot.”

The same learned gentleman has many other curious things concerning the sting, its perforations, and the bottle whence it issues; the fruitfulness, courage, cruelty to one another, want of natural affection to their young ones, their enmity to spiders, or rather their being their most delicious food, &c. They feed on flies, hoglice, spiders; yea on one another.

“ *Terrestres scorpius crudus, tritus & impositus, suæ plagæ remedium est: “ estur quoque tostus in eundem usum.*” *Dioscor.* l. 2. c. 13. totum, p. 92. He gives the symptoms following the sting, *Theophr.* c. 6. p. 427. which do not well agree with *Mr. Maupertuis’s* observations. “ *Quidam & ab ipsis foetum “ devorari arbitrantur: unum modo relinqui solertissimum, & qui se ipsius “ matris clunibus imponendo, tutus & a cauda, & a morsu loco fiat. Hunc “ esse reliquorum ultorem, qui postremo genitores supremus conficiat.*” *Plin.* l. 11. c. 25. p. 274. “ *Pelli interficique a prole tradit Aristoteles.*” *Dalecamp.* in *Plinii*, l. c.

S E C T. II.

They are called diuretic, and a remedy for the wounds they give: but are of no use here. The oleum Scorpionum was thrown out of the *Lond. Disp.* edit. 1721. as were the insects themselves, edit. 1746. We retain the name, but few keep the substance. “ *Dose a ʒß. ad ʒß.*” *Lem. Diet.* 496.

“ *Urinam cient, calculo renum aut vesicæ impeditam (vivi incinerati & “ exhibiti). Ictibus propriis subveniunt, (triti & impositi).*” *Præp.* 1. Oleum “ *Scorp. simplex.* 2. *Oleum Scorp. compos. Mesuæ.* 3. *Oleum Scorp. mag- “ num Matthioli.* 4. *Oleum Scorp. sanguineum.*” *Schrod.* p. 871.

Scorpions feeding on insects, their juices may perhaps be acrid and diuretic: but whether they are so I cannot tell. That their sting prove mortal, the sting must

must go further in than the perforations, which are at some distance from the point, and convey the virus into some of the veins, which perhaps the blood, flowing out, often carries away with it; which accounts for the sting's proving so seldom mortal. By some experiments made with common oil on the bite of a viper at London, one would think that the virtues of the oil of scorpions might be owing to the oil only, if it has any. But a great variety of such experiments made at Paris since seem to prove that oil-olive is no cure for such bites; neither, mixed with the virus of vipers, does it enervate its virulency.—See a Narration of Experiments made 1 Junii 1734, before several Members of the Royal Society, on one William Oliver, a viper-catcher, who suffered himself to be bit by a viper, or common adder; and on other animals likewise bitten by the same and other vipers, drawn up by *Crom. Mortimer, M.D.* their secretary, with some remarks on the cure of the bite of a mad dog; *Phil. Transf.* vol. 39. No. 443. for October 1736: wherein it is observed that common salad oil was found an effectual cure of the bites of vipers, even after the parts were swelled, and other direful symptoms had already followed. See also a *Memoir*, wherein is examined whether oil-olive is a specific for the bite of a viper, by *Mess. Geoffroy and Hunauld, Mem. Acad.* 1737. p. 255—285. Now since we have no reason to doubt of the facts related in either of these papers, the difference must, in my opinion, be owing to the vipers in England not being so virulent as they are in France.—Oil seems to contribute no more to the cure than as it relaxes the parts, and so alluages in some measure the pain.

“Obstupefco ad Galeni verba, quando, *Simpl. Med. l. 10. (fol. 75. G.)*
 “ubi dixit sputo hominis jejuni Scorpiones occidi, subjungit, propriis oculis
 “se vidisse, & hanc experientiam pluribus vicibus sibi comprobata. Si ho-
 “mines & scorpiones, qui illa ætate Romæ & Pergami nascebantur, similes
 “erant iis nunc in Hetruria nascentibus, licitum mihi sit dicere, bona cum
 “venia Galeni, non possem me credere, hoc niti experientia; namque pluri-
 “bus vicibus curavi per sex dies continuos sputari a jejunis hominibus & siti-
 “bundis in Scorpiones, & Scorpiones non sunt mortui. Moriuntur equidem
 “certe, spatio quadrantis horæ, si singulis illorum supra dorsum, tres aut
 “quatuor guttæ, olei olivarum infundantur. Unde multo magis stupori
 “mihi est Albertus magnus, qui libro de animalibus recenset, quod immer-
 “ferit aliquando in lagenam olei Scorpionem, qui ibi vixerit ultra 21 diem se
 “movendo, & in gyrum in fundo hujus olei volvendo. In simili vase, fere
 “pleno, ipse inclusi viperam, &c.” *Franc. Redi Obs. de Viperis*, p. 235.
 Vide *Nucl. Belg.* p. 266.

V I P E R A.

S E C T. I.

Vipera, offic. Vipera, *Aldrov. Hist. Serp.* 115. *Merret pin.* 203. *Gesn. de Serp.* 125. *Bellon. Clus. Exot.* 123. *Charlet. Exerc.* 32. *R. Syn. Quad.* 285. *Ionst. de Serp.* 7. *Worm. M.* 262. Vipera, offic. Dale 395. The Viper, or Adder.
 —This is a viviparous somewhat scaly and variegated serpent, about two feet long sometimes, endued with a sort of weapon, tusk or fang on each side

of its upper jaw, which conveys its poison in biting: if taken by the tail they cannot lift up the head so as to bite the hand.

They are pretty common in our moors, thickets, stony places, &c. being natives of cold as well as of hot climates, though less noxious in the former. The symptoms following the bite of a viper, especially in hot countries and seasons, are very terrible, if once the blood be infected with their poison. "Vipers eat rats, frogs, worms and several other insects, when at liberty; but, being confined, they will live more than a year (*Redi* says ten months only) without eating any thing." *Lemery's Dict.* 572. "Wormius herbis vesci ait, at certe non solis; nos enim e dissecti ventriculo tres mures adultos exemimus, quos, quod mirum, integros deglutiverat, cum collum vix minimum digitum ambitu æquaret." *R. Syn. Quad.* 286.

Fran. Redi Observationes de Viperis (which you have in his *Opusculorum Tom. alter, Amstel.* 1685, in 12mo, p. 155—248.) are very curious, both entertaining and instructive. It is incredible what a number of vulgar errors, adopted by many famous authors, both ancient and modern, he has confuted by experiments. For instance (α) That Viper's gall is poison. "Decretum fuit a felle faciendum experimentorum initium, & tanto magis, quia vir doctus, quidem & in lectione autorum tam antiquorum quam recentiorum multum versatus, omnia sua oppignerasset, nisi quædam minima guttula fellis viperini epota, hominem ex robustissimis, & quamcunque bestiam ex ferocissimis necaret; addens rem amplius in dubium non revocari; eam Galenum medicos docuisse; eam Plinium diserte dixisse; Avicennam credidisse parum medicamenta juvasse illos, qui fel viperæ biberant; Rhasin existimasse, nullum valuisse ingenium, nec medicum præsidium, sed Dei fuisse necessarium auxilium; Hali Abbas affirmasse fere nullum opponi remedium posse, infernali huic veneno; idem etiam Albucasi visum. His additi Gulielmus de Placentiis, sanctus Arduinus, cardinalis de S. Pancratio, Bertruccius Bononiensis, B. A. Abbatus, Cardanus, J. C. Claudinus, & tot tantique alii, quorum celeberrima fama. . . . Interea audiendi gratia stabat in angulo quodam Jacobus Sozzi viperarum captor, qui subridendoprehendit fel viperæ, mistumque dimidio cyatho frigidæ, illud hausit vultu intrepido, ac conspiciendum dedit, quam fuerint delusi suprascripti autores, seque obtulit ad ebibendum omnem eam quantitatem fellis quam maximam poscerent." Vide *Redi's Obs.* p. 161. It (Fel. Vip. 313.) was afterwards given to several animals, and among the rest to a dog; and to a cat all the entrails of four vipers, which licked her lips sweetly after them, and all without the least harm.

(β) That the liquor conveyed through the dentes canini is poison taken by the mouth. "In fundo duarum illarum vaginarum, intra quas repositos viperæ habent dentes humor quidam stagnat, colore & sapore simillimus olei amygdalorum dulcium; qui quando vipera evaginat dentes, & morsum minatur, necessario effunditur in vulnus, quia vaginæ se contrahunt. Quæsitum est, an liquor iste ore assumptus queat necare? & a quibusdam constanter affirmatum est, sed ab aliis negatum; & idem Jacobus viperarius obtulit se ad ebibendum ejus cochleare plenum, & dictum factum, visus est illud delicatissime & per vices degustare sive elambere. Viperam ex maximis & ferocissimis, & irritatissimisprehendit, & curavit ut in dimidium vini cyathum, non solum omnis liquor vaginularum profluerit, sed insuper

“ omnis spuma, omnisque saliva, quam exagitata, percussa, compressa, irata
 “ rejicere potuit, & sic bibit hoc vinum ac si esset liquor gratissimus, & se-
 “ quenti die, cum tribus viperis contortis inter se, denuo eundem lusum ex-
 “ hibuit, sine ullo metu. Ob id ego quatuor capita viperæ semiviva, sangui-
 “ nem stillantia, & squalida, immersi in scyphum aquæ plenum, & rescui
 “ omne pulpamentum palati & maxillarum, & curavi ut omnis humiditas
 “ quæ ibi continebatur inde scaturiret, donec aqua redderetur spumosa, tur-
 “ bida & ingrata, postea fere totam infudi in stomachum hædi & residuum
 “ quod supererat, anati fiebat jusculum commodum; sed ne hæc, nec ille ul-
 “ lum veneni accepti signum dederunt. Absque ergo temeritate delusi dicen-
 “ tur Albertus Magnus, eruditissimus Mercurialis, subtilissimus Capivaccius,
 “ & celeberrimus Zacutus, quando dicunt vinum in quo suffocata sit vipera,
 “ esse semper pessimum venenum lethale; & etiam Aëtius, & Dioscorides,
 “ qui idem dixerunt, non solum de vino illo in quo mortuæ sunt Viperæ,
 “ sed de eo etiam in quod caput, bibendi causa, immerferint. Sed non vidi
 “ Viperas adeo cupidas vini uti Aristoteles & Dioscorides ipsas faciunt.” He
 shews that Vipers will not drink wine; that the story in Galen (Simpl. l. xi.
 p. 77. H) of a Viper being suffocated in a bottle of wine is incredible; that
 bottles of wine, wherein Vipers are suffocated, though close stopped, will not
 burst; which is brought by Severinus (from *Paulus Æmilius Perallus*) as an
 argument to prove that Vipers are calidi temperamenti, as if they bursted ob
 nimium calorem carniū Viperinarum; that the liquor flavus intra vaginas
 dentes contegentes, instilled into a wound, kills in three or four hours time;
 that this poison is not derived from the gall-bladder, &c. *Vide* p. 165—197.

(γ) That the female Viper has more dentes canini than the male. “ Quot
 “ dentium illorum Vipera habeat ex libris discere nequeo. Nicander scripsit
 “ masculum habere duos dentes, & fœminam plures: assentitur ejus scholiastes,
 “ Autor l. de Ther. ad Pisonem, Rhasis, Avicenna, Actuarius, Gorraeus.
 “ Aëtius determinavit numerum binarium in masculis, quaternarium in femel-
 “ lis: eandem sententiam foverunt Isaacus, Fran. Cabellus, Zacutus, Mercu-
 “ rialis, Amatus Lusitanus, Fran. Sanches, Casp. Hoffmannus, & alii mino-
 “ ris famæ, Paulus, Ægineta, Haly Abbas, tam masculo quam femellæ,
 “ tantum binos adscribunt. Vincentius Belluacensis numerat tres; Baldus
 “ Angelus Abbatius & Veslingius quatuor: Alb. Magnus affirmat maren
 “ habere duos in superiore maxilla, & duos in inferiore, sibi invicem opposi-
 “ tos. M. A. Severinus asserit, in unaquaque maxillarum superiorum se vi-
 “ disse ad minimum tres, quatuor, atque etiam quinque, fortasse quoque sex.
 “ Cuinam jam credere debemus? Dicam tibi quod vidi plusquam in trecentis
 “ Viperis. Viperæ utriusque sexus, habent tantummodo duos dentes caninos
 “ quibus mordent, firmos & solidos, emicantes ex ossæ maxillæ superioris,
 “ singulos pro latere, & operiuntur vaginis, modo non dissimilli illi quo ipse-
 “ met vidi leones & feles abdere ac contrahere suos ungues. . . Dicti dentes
 “ interius sunt cavi & perforati, usque ad extremum apicem. . . Proinde non
 “ credo verum esse, quia interius cavi sunt, illos dentes esse receptaculum ve-
 “ neni, nec id per arctissimum foramen incisionum in vulneribus, quas mor-
 “ dendo Vipera facit, currere; quoniam apprehensa Vipera & ore ipsius vi-
 “ divulgato, etiam si contegantur dentes, incipit flavus ille & pestilens liquor
 “ supra dentem discurrere, non intra cavitatem, sed evidenter forinsecus a ra-
 “ dicibus

“dicibus ad acumen: atque hoc sæpius plenissime oculis deprehendi.” Then he proves that the teeth are not of themselves poisonous; as *Baldus Ang. Abbatius* and *Schroderus* assert: that music is no cure for the bite of a Viper; as some *Pythagorean* philosophers, *Theophrastus* (as quoted by *Aulus Gellius* in *Noct. Att.*) *Severinus*, and *Zacutus*, would have it: that there is neither sting nor poison in the tail of a Viper; though many ancients (among them *Andromachus*) as well as moderns affirm the contrary, &c. *Vide* p. 197—209.

(c) That the saliva hominis is noxious to (yea kills) serpents. “Postquam legeram in *Hist. Anim. Aristotelis*, ut plurimum bestiis venenatis noxiam esse salivam humanam, desiderium me incescit experiendi an hoc esset verum, & præsertim in Viperis, eoque magis quod & *Nicander* idem affirmaret, & plurimis non modo *Galen*i locis, sed & à *Plinio*, *Paulo*, *Serapione*, *Avicenna*, & *Lucretio* probaretur. Et istis antiquis philosophis subsidio ventum a plurimis recentioribus, & potissimum a cardinale *Ponzetto*, a *Bertruccio Bononienti*, a *Gesnero*, a *Th. Campenella*, a *Marcio Antonio Alamo*, a *Zacuto*, a *Lælio Bisciola*, & a doct. *Ul. Aldrovando*, qui non solum certissimum esse persuasum habet hominis salivâ interfici serpentes; sed & rationes dare conatur, reducendo id tandem ad vanum & chimericum nomen tam decantatæ antipathiæ. Sed *P. J. Faber* & *M. Aur. Severinus*, missâ antipathia, adducunt pro causa sal ammoniacum, quo plenissimam esse statuunt salivam humanam. Inclusi itaque sex Viperas electas grandiori pyxidi, quibus per 15 dies, horis matutinis, ordine atque sigillatim omnibus feci aperire gulam, & curavi ut aliqui homines jejuni illam implerent sputo; ac postea recluso. per vim ore, ipsas adegi ut deglutirent illud; omnes vero adhuc vivunt, nec ullo morbo unquam fuerunt correpti; sed per dulcedinem novi & inusitati alimenti apparuerunt mihi quasi pulchriores, alacriores, & præter morem fugaces.” *Vide* p. 232. — I might give many more experiments: but let these suffice to excite you to peruse this noble author, and real friend to truth.

If you ask how this insipid liquor acts, in proving so suddenly mortal: I answer, “Si hoc a me expectatis, falleritis: hoc iis annumero, quæ nec scio, nec scire spero.” *Redi's Obs.* p. 210—212. Some objections were made against *Redi's Observations*, in *Mr. Charas's Treatise*, called *New Experiments about Vipers*; which are satisfyingly answered by *Redi* in his *Epistola*, annexed to his *Observationes*, p. 251. ad 293.

Marci Aurelii Sever. Vipera Pythia, i. e. *De Vipera Natura, Veneno, Medicina, Demonstrationes & Experimento nova*, Patavi, 1643, 1651, in 4to. seems to be fuller of learning than truth or accuracy.

S E C T. II.

Vipers are antacid, very nourishing, and of easy digestion; called sudorific and alexipharmic; and commended in consumptions, weakness, scurvy, scabies, lepra, French pox, dysentery, small-pox, measles, malignant fevers, agues, pestilence, diseases of the nerves, poisons, &c.

“Serpentes vim habent alexiteriam, sudoriferam, non venenatam. *Ufus præcipui* sunt intrinsecus in omnibus morbis venenatis, ac malignis, quales sunt

“ sunt pestis, febris petechialis, lepra, & similes. Quinimo & phthisicos,
 “ Gallicove morbo laborantes, viperarum præcipue usu juvari, ceu secretum
 “ venditat Cardanus. Si scilicet caro cocta comedatur, jus bibatur, pingue-
 “ doque spinæ & juncturis illinatur. . . Exenteratam & decoriatam carnem,
 “ abjectis tamen felle, cauda & interaneis) serpentum, loco cibi assumere licet.
 “ Pinguedo emollit strumas, oculorum rubedini & maculis medetur, visum
 “ acuit, podagricos dolores mitigat. Fel iſtibus serpentum impositum, vene-
 “ nositatem in se allicit; idem & de capite imposito affirmant. *Præpar.* 1.
 “ Pulvis, &c.” *Schrod.* 829.

“ Viperarum vires vide in serpentum descriptione, quas viperæ excellenti
 “ gradu obtinent. Præter eas sunt qui viperæ caput ad anginam notham
 “ commendant, (collo appensum). *Præpar.* Oleum, Sal Theriacale, Tro-
 “ chisci, Sal volatile, &c.” *Schrod.* 833.

1. The viper lives on animals, at least as well as on vegetables; is eaten in large quantities, and affords the same chymical principles with other animal substances. “ 3xvj. of dried vipers (the head, tail, skin, and guts, being fe-
 “ parated) yielded 3x. 3ij. of phlegm, oil, and salt; the carbo weighing 3v.
 “ 3ij. whence a small quantity of fixed salt was got. The liquor by rectifi-
 “ cation gave salis vol. 3j. 3vj; olei nigri 3ij. 3iij; spiritus 3iij. & phlegma-
 “ tis 3iij.” Vide *Lem. Chym.* p. 796. So that there evaporated in all 3v. —
 2. Neither head nor tail, gall, nor any other part, whether outwardly applied or inwardly taken, is a remedy or antidote for the poison of its bite. Vide *Redi's Epist.* p. 287—292; nor does vipers flesh cause any thirst, or other uneasiness, though eaten in pretty liberal doses. *Redi* gives instances of their being used, viz. one of a person who lived mostly upon vipers, for four weeks using them in powder, broth, emulsion; of others who drank wine in quo viperæ suffocatae erant; of another who consumed in about six weeks ninety vipers, taken in summer, and roasted like eels; &c. yet none of them was in the least troubled with thirst. *Obs.* 224—226. *Venia Galeni*, &c. — 3. Vipers are commended in too many diseases, and of too different natures, to deserve the praises given. There is even cause to suspect that all their virtues depend on their nourishing quality: and that their sudorific and alexipharmic virtues are to be reckoned to the many vulgar errors that have too long been believed concerning them. They soon turn putrid; hence I called them antacid.
 “ Dof. ad 5j. in pulv. ad 3ß. in decocto.” *N. B.* 306.

“ Viperæ (ἰχθυὶνς) caro cocta & in cibo sumpta claritatem oculis affert,
 “ ad nervorum vitia proficit, incrementesque strumas reprimat.” *Dioscorid.* l. 2. c. 18. who, after directing how to boil them, and denying they breed lice in those that eat them, adds, “ Insuper vero referunt nonnulli, qui iis vescantur
 “ longam senectutem adipisci, &c.”

They are little used here, except in the Theriaca. The Sal volatile Viperarum is no better than the Sal vol. C. C. however much commended by authors.
 “ The volatile salt of Vipers is one of the best remedies we have in physic:
 “ it is good for malignant and intermitting fevers, for the small-pox, apo-
 “ plexy, epilepsy, palsy, hysteric distempers; and for the bites and stings of
 “ all the venomous creatures. Dose a gr. vj. ad xvj. in a proper liquid.”
Lem. Chym. p. 799. Others add pleurisies, and all the virtues attributed to the Vipers themselves. However it has no place in the *Edinb.* or *Lond. Pharm.*

But

But in the last you have a *Jus Viperinum* and a *Vinum Viperinum*. The Jus is most accurately directed. For the Vinum the *Committee* in their plan proposed Vipers living and intire; but they are ordered dried. See *Dr. Mead's Essay of the Viper*, edit. 1745.

L E C T U R E LXXX.

Containing some Juices and Animal Substances in Use in
Phyfic.

A X U N G I A.

S E C T. I.

AXungia, Axungia Porci, *offic.* Axungia Porcina, *Ph. Lond.* Hogslard, Axunge, or Swines-grease.—This needs no description.

If animal sulphurs are to be distinguished by their consistence only, their number is not great; but if by the animals which produce them, they are in a manner numberless; though little differing in virtues. How many adipes, axungia, butyra, medullæ, pinguedines, seva, are to be met with in authors I cannot tell: you have plenty of them in *Schroder's Pharmacopæia*; as also in *Dale's Pharmacologia*, to which I refer for the synonymous names of the animals which furnish them, or the like substances, which I am to consider only in general.

I have counted about fifteen pinguedines in Hippocrates, twenty-six in Dioscorides, and eighteen in Galen. In the *Lond. Pharm.* preceding that of the edition 1721 there stood about forty such fat simples; of which seventeen were thrown out of the last: and now in the edition 1746 Axungia Porcina and Sevum Ovillum only are retained in the M.M. the Axungia Viperina not being mentioned among the simples, though ordered in the Unguentum Tutia. It was always my opinion that Axunge and Tallow might serve for all the Pinguedines, and am glad it is now supported by so great authority: as is also my rejecting, as of no use, the Fel, Pulmo, Ossa, Talus, Stercus, & Vesica Suis, vel Porci, which are among *Schroder's Officinalia nativa*.

S E C T. II.

It softens, lubricates, relaxes, corrects alkaline and bilious acrimony, and so is anodyne; is used only outwardly, as in Unguento Antipforico utroque, Ung. Arcæi, Ung. citrino, Ung. epipastico, Ung. mercuriali, Ung. populeon, and Ung. pomatum, Emplastrum defensivum, Empl. diapalmæ, &c.

“Pinguedo suis (adepts absolute dictus) calefacit minus, ideoque in unguenta
“refrigerantia infertur; inveteratos dolores & articulorum sedat inuncta cum
“cinere straminis fabacei aut calce. Lardum coctum & circumligatum ossium
“fracturas feliciter conglutinat.” *Schrod.* p. 831.

Animal

Animal fats have all much the same taste and smell; and any proper spirit they contain is rather putrescent than acescent; and hence they preserve iron better from rust than vegetable oils for the most part do. Every animal oil has, perhaps, a proper spirit. Dogs can distinguish several animals by their smell; and this proper spirit of each may have proper specific virtues. True. But dogs can also distinguish individuals the same way. Does it thence follow that every individual of the same species has proper specific virtues? I think not. Especially since experience teaches us, that we can live on a vast variety of species of animals, or on one species only for a long time, without sensibly impairing our health. The Tartars, who delight in horse-flesh, are as strong and healthy as those who abhor it and live on beef and mutton.

C A S T O R E U M .

S E C T. I.

Castoreum, *offic.* Castor.—This is a pretty hard and friable substance, of a brown colour, of a rank bitter taste, and strong smell; brought to us in bags, two commonly being tied together, of different sizes and figures, found in the groins, between the umbilicus and pudenda of both male and female Castors. The best comes from Russia.

Castor, *offic.* Dale 407. Schrod. 803. Castor, *Gesner. Quad. digit.* 309. *Al-drov. Quad. digit.* 276. *Worm. Mus.* 320. *Insf. Quad.* 102. *Charlet. Exer.* 18. Castor *sive* Fiber. *R. Syn. Quad.* 209. The Beaver—is a native of Muscovy, Poland, Norway, &c. and some think anciently of Britain. It is an amphibious animal, very sagacious; and is well described in *Mr. Ray's Synopsis Quad.* 209. “Castor quasi γαστωρ, quia est animal ventricosum. Ideoque ridiculi sunt qui a castrando deducunt. Fiber, quod φιδρος habeat pilos, i. e. molles: unde levicula mutatione, aliud nomen ejus Bever, quomodo Belgis vocatur Bever, Gallis Bievre. The Bever, aut Castor.” *Charlet. Exer.* 18.

It is written καστοριον, γαστωρ, and καστορος ορχις, in *Hippocrates*, variis locis; καστορος ορχις, in *Dioscor.* l. 2. c. 26. p. 95. “Castorium nuncupant testiculos Castoris.” *Galen. Simpl.* l. 11. fol. 80. A. For it was a very ancient vulgar error, that the Castoreum was the testicles of the Castor; and *Sextius Niger* seems first to have discovered the mistake. “Easdem partes sibi ipsi pontici amputant fibri, periculo urgente, ab hoc se peti gnari, Castoreum id vocant Medici.” *Plin.* l. 8. c. 30. p. 139. “Imitatus Castora, qui se

“Eunuchum ipse facit, cupiens evadere damno

“Testiculorum: adeo medicatum intelligit inguen.” *Juv. Sat.* 12. v. 34.

“Spectabilis naturæ potentia in his quoque, quibus & in terris, & in aqua victus est, sicut & fibris, quos Castores vocant, & Castorea testes eorum. Amputari hos ab ipsis, cum capiuntur, negat *Sextius* diligentissimus medicinæ. Quinimo parvos esse substrictosque, & adhærentes spinæ, nec adimi sine vita animalis posse.” *Plin.* l. 32. c. 3. “Vanum est autem quod narratur, animal ipsum dum a venatoribus urgetur, testes sibi avellere & abjicere: fieri enim nequit ipsos ut attingant, quippe qui sint, velut in sue
“sub-

“substricti.” *Dioscor.* l. 2. c. 26. However *Rondeletius* (qui obiit 1566.) and since him many others, have sufficiently explained the structure and situation of these *Castoris folliculi*. Vid. *Job. Franci Castorologia*, “explicans *Castoris animalis naturam & usum medico-chemicum*; antehac a *Joh. Mario Bol- lensi, & physico Ulmano*, postea *Augustano labori insolito subiecta*: eam “vero ejusdem autoris & aliorum medicorum observationibus luculentis in- editis, adfectibus omissis, & propria experientia, parili labore aucta.” *Augustæ Vindelicorum* 1685. in 8vo; also *Bib. Pharm.* 1. p. 490—512; and the *Acta Lipsiæ* 1684. p. 360, where there is a *Dissectio Castoris maris & foeminae*.

“Infertur *Castoreum officinis* ex variis regionibus, plurima tamen copia ex “*Poloniæ regno, & Ruthenico imperio*; tum etiam ex *India orientali & occidentali*. Optimum censetur quod *Dentiscani* vendunt negotiatores, ex “*Polonia, Russia, Prussia*, eo comportatum, *Dantiscanum* hinc vulgo dictum. “*Canadense vilissimum æstimatur*, quia fere expers odoris, & is quem ex- “halat ingratus est; unde multi, quamvis immerito, illud censent adultera- “tum. Omni autem *Castoreo præfertur* illud quod ex oriente importatur. “Vid. *Mem. Acad.* 1712.” *Rieger. Introd.* ii. p. 583. “*Figura Castoris Rus- sici ex ipso animali in Russia depicta*, mihi communicata est valde quidem “diversa ab imagine *Castoris Canadensis*, cujus delineatio mihi eodem tem- “pore facta est.” *Dale* 408. *Are they specifically different?*

S E C T. II.

Castor is antacid, attenuant, detergent, diaphoretic, and carminative; call- ed cephalic, nervine, and alexipharmic; and commended internally in lethar- gies, vertigoes, palsy, convulsions, epilepsy, spleen, vapours, colic, hickup, palpitation of the heart, green-sickness, difficult labour, grindings, malignant diseases, narcotic poisons, &c. and externally for deafness, pains, and ringing of the ears, &c.

“*Officin.* Axungia, testiculi, qui *Castorium* vocantur, & pellis. 1. Axun- “gia peculiariter nervoso generi ac utero convenit, adeoque morbo comitiali, “membris resolutis, convulsis, apoplexiæ, &c. 2. *Castorium*, calfacit 3. “siccat 2. attenuat, aperit, flatus discutit, nervos, nervosæque partes, adeo- “que caput roborat, spiritus animales torpidos excitat, venenis resistit, ster- “nationem ciet, anodinum est, menses promovet. Hinc proficuum est in “lethargo, apoplexia, epilepsia, paralyti, vertigine, artuum tremore, de- “fluxionibus ad articulos, strangulatu uteri, dolore colico, idque usu tum “externo tum interno. Insuper tinnitus aurium, ac difficultatem audiendi “corrigit (auri inditum) dentiumque dolori succurrit. N. in strangulatu uteri, “admovetur naribus, subligatur axillis, inditur umbilico. Opii virulentiam “corrigit. 3. Pellis opem fert podagricis & paralyticis (parata & induta). “*Præp.* 1. Oleum infusum. 2. Ol. stillatitium. 3. Electuarium *Diacasto- rium*. 4. Extractum cum sp. vini rectificato.” *Schrod.* 803.

1. It is of a disagreeable bitterish rank taste, and strong heavy smell. “Saporis acris, amaricantis, nauseosi, odoris gravis.” *Herm. Cyn. part.* ii. 45. “Saporis acris, amaricantis, nauseosi; odoris gravis & fragrantis.” *Dale* 408.

“Odoris

“ Odoris fortis, fœtidi, & penetrantis; saporis acris, calidi, specifici.” *Nucl. Belg.* 67. — 2. It flames in the fire, gives a deep tincture to spirit of wine, and dissolves equally in aqueous and sulphureous menstrua. “ Solvitur tam in spirituosus & oleosis, quam in aquosis menstruis. Videtur esse species quædam salis volatilis oleosi, cui multæ partes terrestres sunt admistæ.” *Rieger. Introd.* ii. 582. Hence it appears to be a saponaceous substance, and acts not by its singular stimulus only, but also as a subtle detergent; yea seems to rarify the juices: consequently it is not proper in bilious, inflammatory, and putrid diseases. It is said to be a specific corrector of opium; and yet to be anodyne itself: and both these qualities it may partake of in some degree as it stimulates: but I find nothing specific here. — 3. It is commended by both ancient and modern authors in more diseases than I have named. In a word, it may do service, *ubique natura languet*. Of what use is it to the animal itself?

S E C T. III.

Castor may be given in substance to ʒß. in infusion to ʒj: the Tinct. Castorei to ʒß. which contains the tincture of ʒß. in rectified spirit. Castor is an ingredient in the Tinctura sudorifica, Pulvis ad partum, Mithridatium, Theriaca utraque, Pilulæ fœtidæ, Pil. gummosæ, Pil. pacificæ, Trochisci de myrrha, & emplastrum cephalicum.

The Tincture of Castor in the *London Disp.* is drawn with proof spirit. Is this better than the rectified? How much does either dissolve? How much rises by a simple distillation? Is *Rieger* above cited right?

The quantity in which *Hippocrates* gives it is ob. ʒ. but in *Dioscorides* the dose is ʒij. “ Datur a gr. v. ad gr. xij. *Schrodero*,” ad ʒß. *Nucl. Belg.* “ Datur a ʒj. ad ʒß. in majori dosi datum alvum solvit.” *Herm. Cyn.* 245.

N. B. Vide *James's Pharm.* p. 74. but especially *N. Disp.* p. 110. where we find “ Water extracts the nauseous part, with little of the finer bitter: “ rectified spirit extracts this last, without much of the nauseous; proof spirit “ both: water elevates the whole of its flavour in distillation: rectified spirit “ brings over nothing. Castor is looked upon as one of the capital nervine “ and antihysterical medicines: some have nevertheless doubted of its virtues; “ and Newman and Stahl declared it insignificant. For our own part, we “ never could find it answer the character which has been usually given of it.

C E R V U S.

S E C T. I.

Cervus offic. Dale 402. *Schrod.* 805. *Cervus, Gesn. Quad.* 326. *Aldrov. Quad. bisulc.* 769. *Ionf. Quad.* 58. *Charlet. Exer.* 11. *Cervus, Græcis* ἰαπερ, nostratibus Red Deer: Mas, a Stag vel Hart dicitur; fœmina a Hind; fœtus seu pullus, a Calf. *R. Syn. Quad.* 84. The Hart.

Stags lose and renew their horns every year: they begin to sprout in March, are soft and eatable, being covered with a downy skin (whence they are called

velvet horns) until July, when they are come to their full growth, harden, and lose their skin: thus they continue to the succeeding spring, when they break off, and give place to new ones, which begin to appear in ten or twelve days after. They are called calves or fawns till a year old, and have no horns. The second year they get a single or straight horn, and are called Brochs, Brockets (*à Gall. broche*) and Prickets. The third year the horns are bifid, or have one branch; and the animals are called Sorells. The fourth year the horns are trifid, or have two branches, and then they are called Stags or Bucks; and not sooner in the language of gentlemen hunters. And afterwards the horns are said to be branched till the full head. Vid. *Arist. H. An.* i. 706. "Constat tamen in multo plures ea ramos dividi ante quartum annum." *Charlet. Exer.* p. 11. Quando palmata dicenda?

If a Fawn be castrated it never gets horns; if when a Pricket, it continues a Pricket still, the horns neither branching nor ever falling off. The same holds of the Sorells, &c. for as the head is at the time of castration, so it continues during the animal's life. Vide *Aristot. Hist. Animal.* l. 10. c. 50. D. It is said also that in these things the male of all the *Cervinum* genus (*i. e.* animalia quadrupeda, ruminantia, bisulca, cornibus deciduis ramosis *Raii*) agree: and none but the males carry any horns. Vide *Redi Opuscul. Tom. ult.* p. 116. The Red Deer are natives of Britain, and many other countries.

"*Cervi officin. nat.* 1. Cornu. 2. Corium. 3. Os de corde. 4. Genitale. 5. Testiculi. 6. Sanguis. 7. Lachrymæ. 8. Medulla. 9. Sevum. 10. Talus seu Astragalus. 11. Lapis." *Schrod.* p. 805. According to our Dispensatory *Cervus* furnishes the shops with a Cornu, Os e corde & medulla. But the Cornu only is officinal, and as such stands in the *London M. M.*

Deer are said to live a hundred (yea some hundreds of) years; and the arteries, in and near the basis of the heart, to turn cartilaginous and ossify by age, affording what is called os e corde *Cervi*. *Vesalius*, *Rondeletius*, and *Brasavolus*, think it fabulous that bones are ever found in a stag's heart. But, whatever is in this, sure I am such bones as the shops furnish under that name do not in the least resemble cartilaginous or ossified arteries; but are really ossa e corde boum; of which I have two or three which I took out with my own hand. They are of different figures and sizes, according to the age and bulk of the bull, ox, or cow, out of which they are taken. I have examined I do not know how many hearts, and found a bone in every one of them; but never in a calf's heart. When do they begin to be formed? "The bone found in the heart of a stag is about half as long as the little finger, broad as the nail, flat, thin, commonly triangular, and of a white colour. Choose it rather small than great; for the bone of an ox's heart, which is larger and not otherwise different, is sold for it." *Lem. Diet.* p. 135. But the smallest there, and that I ever saw, I took out of a cow's heart, and it is not the half of the length or bigness which Mr. Lemery assigns them. In one, an. 1750, I found two bones; one very large, and another very small: as I did also in another in Autumn, 1755.

S E C T. II.

Hartshorn is antacid and nourishing, affording plenty of jelly of as easy digestion, and perhaps every way as good, as viper broth; called antiseptic, sudorific,

sudorific, alexipharmic; and commended in the small-pox, measles, malignant fevers, pleurisy, consumption, epilepsy, fluxes, hæmorrhages, &c.

“Cornu crudum resistit putredini, malignitatem corrigit, sudorem ciet, balsamum humanum corroborat. Hinc *usus* ejus proficiuus in variolis, morbillis, febribus putridis & malignis, aliisque morbis ubi sudore opus est. Incoqui potest decoctis, macerari in infusionibus, quippe in substantia exhibitum, crudum fere egeritur. *Preparata* ex cornu, &c.” ac vires cæterarum partium videantur in *Schrod.* p. 805—807.

1. The crude horn seems too hard for the stomach; yet since vinegar corrodes it, and suspended three days in the vapour of boiling water it became white and friable (which is called *calcinatio philosophica*), and by decoction in water a strong but soft and almost insipid gelly is got from it, it is not improbable but our stomachs may digest it in part, if rasped fine; though thus it is needless to use it, the gelly containing all its virtues; yea and the virtues of every part of the animal which is commonly used. — 2. This gelly, gelatina, or gabreda, as it is called in authors, is putrescent like other animal fluids, so very improperly called antiseptic, and as improperly used in putrid and inflammatory diseases, as also in hectic consumptions; unless well qualified with some acid juice, as succus limonum vel aurantiorum, as in the gelatina C.C. *Pharm. Edinb.* or mixed with some gelatina ribesiorum. Tho' taken per se I reckon it no way inferior to the very formal and sumptuous jus viperarum I mentioned above. — 3. By a chemical analysis cornu cervi 3xv gave salis volatilis 3ivß, spiritus volat. 3iv. 3vij, & carbonis 3ix. 3ii. According to *T. Mem. Acad.* 1700. Here is no mention made of the oil. Were there 3ijß olei, and was nothing lost? *vide Sericum infra.* Hence it appears that vipers yield much more volatile salt than hartshorn. But what then? So does the hair of one's head. “Twelve ounces of hair yield salis volatilis 3j. 3vij, olei nigri 3iij, spiritus 3ij. & phlegmatis 3ix. there remaining carbonis 3iiijß.” *Lem. Chym.* p. 796. so that 3ß was lost. But—4. The ancient Greeks used only the calcined hartshorn, and that inwardly, as drying and astringent, for fluxes and hæmorrhages; and outwardly for sore eyes and foul teeth. *Vide Hippoc. de Morb. Mul.* l. 2. p. 667. lin. 14. and 669 l. 48. *Diosc.* l. 2. c. 63. p. 102. *Galen Simpl.* l. 11. fol. 79. G. It is true some attributed an alexipharmic virtue to the right horn; as, “Cervus etiam dextrum cornu fodiens abscondit, quod contra venena e rana rubeta, aliaque auxiliatur.” *Theoph. (De Animal. quæ dicuntur invidere)* p. 474: others to the left; as, “Cornu sinistrum a nemine compertum esse adhuc fertur: occulit enim id (cervus) tanquam quodam medicamento præditum.” *Aristot. H. Animal.* l. 9. c. 5. p. 706. D. “Cervi morfi vel a phalangio vel a quovis ejusdem generis, cancos edunt.” *Ibid.* G. “Cervi vipersas edunt, quibus cætera (animalia) moriuntur.” *Theoph. Caus.* l. 4. c. 10. p. 310. *Pliny*, l. 8. c. 32. & *al. loc.* says, “Et iis est cum serpente pugna investigant cavernas, nariumque spiritu extrahunt renitentes. Ideo singularis abigendis serpentibus odor adusto cervino cornu. Contra morsus vero præcipuum remedium ex coagulo huius in matris utero occisi. . . Febrium morbos non sentit hoc animal, quin & medetur huic timori. Quasdam nos principes scæminas scimus omnibus diebus matutinis carnem eam degustare solitas, longo ævo caruisse febribus, quod ita demum existimant ratum, si vulnere uno interierit. . . . Exilio

“ (ait) his (serpentibus) esse cervos nemo ignorat, ut si quæ sunt extractæ
 “ cavernis mandentes. Nec vero ipsi spirantes tantum adversantur, sed mem-
 “ bratim quoque. Fugari eas nidore cornus si uratur, dictum est. . . . Pellis
 “ ejusdem animalis substratæ, securos præstant ab eo metu somnos. Coagu-
 “ lum quoque ex aceto potum ab ictu; & si omnino tractatum sit, eo die non
 “ ferit serpens. Testes quoque ejus inveterati, vel genitale maris salutariter
 “ dantur in vino. . . Fugiunt & omnino dentem cervi habentes, aut medulla
 “ perunctos, sevoe cervi aut hinuli, &c.” And further, “ Mulierum purga-
 “ tiones adjuvat. . . Cornus cervini cinis potus. . . Vulvas & pilo cervino suf-
 “ fire prodest. Tradunt cervas cum senserint se gravidas lapillum devorare;
 “ quem in excrementis repertum, aut in vulva (nam & ibi invenitur) custodire
 “ partus adalligatum. Inveniuntur & officula in corde & in vulva, per-
 “ quam utilia gravidis parturientibusque.” l. 28. c. 19. Some attribute great
 virtues to both horns, as well as to several other parts: but their accounts are
 so stuffed with fables as to merit little attention; however much insisted on
 by the Arabians and their followers. — 5. And lastly, Deers-flesh, testes,
 velvet-horns, kidneys, &c. are eaten freely and plentifully, as well as beef or
 mutton, and with the same effect. In a word, if there be any specific virtues
 in this animal, the horns have as good a claim to them as any other part, yea
 as all the other parts. The gelly contains all of the crude horns that is nourish-
 ing, and all that is digestible: the calcined horns are only a lean (*vix* absorbent)
 earth, no better than any burnt bones.

Can the *os e corde cervi*, suppose it were genuine, corroborate the heart
 more than the arteries, of which it is said to be formed? or the arteries more
 than the heart itself? or the heart more than any other muscle? “ Qui mi-
 “ rificam ei in roborando corde vim tribuunt, verissime falluntur. Inter
 “ Græcos recentiores Actuarium producit Sylvius, qui cor roborare dicat
 “ totius substantiæ similitudine. Huic consentiunt Arabes. Addit Sylvius,
 “ An cartilago hæc substantia magis præstare id queat, quam cordis & arte-
 “ riarum corpus, ipsi viderint. . . Ego paucis me absolvo; est os, neque fa-
 “ cultatem ab aliis ossibus peculiarem habet.” *Hoffman*, p. 520.

The common saying, *simile ad simile tendit*, like draws to like, has been ad-
 vanced to support a very groundless opinion, *viz.* that the heart is more cor-
 dial, the lungs more pectoral, &c. than the other parts of the same animal.
 I call it groundless, because not supported by experience. For before such
 animal substances can nourish or strengthen any viscus, their texture must be
 dissolved; and if they are quite natural when taken, the action of our organs
 on them must alter their nature, and so render them more acrid, or less natural,
 and consequently less fit to nourish the part they resembled. And in fact
 we find that all the chicken is not only nourished by, but even in a manner
 formed out of, the albumen, until it be hatched: and that gelatina C. C. is
 by far more cordial than the *Cor Cervi* itself. But granting there were
 something in the common proverb, in what are the pulmo vulpis, hepar lupi,
 testes equi, &c. preferable to the pulmo, hepar, testes, &c. agni, vituli, porci,
 &c. It has been too much the reproach of medicine, that ever such abomina-
 ble stuff should have been numbered among remedies. These abominanda
 cannot be called more similar to the like parts of a man than a sow's are.
 I might here take notice of the cannibals; but of them under the article *Mumia*.

The epilepsy is one of the diseases in which *C. C.* is commended: and if it proceeds from acids in the stomach, *C. C. C.* may do service, if it be absorbent; which I fear it is not, but rather useless: though in powder it must be as good as the cranium humanum, which too long passed for a specific antiepileptic. For, to pass by its hardness, indigestibility, or chymical principles, &c. this virtue is not at all confirmed by experience. Since, 1. Some attribute it to the cranium simply, as *Ph. Edinb. Lond. edit. 1721, &c.* 2. Others to the cranium hominis violenta morte extincti, in which the brain has putrified. “Saltem os capitis valet ad epilepsiam, non item ossa reliqua; tum demum cerebrum totum in cranio consumitur & liquefcit, cujus liquoris irroratione continua, vires cranium acquirit alias, quas aliis abesse ossibus animadvertimus.” *Helmont, Magnet. Vuln. curat. p. 712. § 51. sub finem. Vid. Hoffm. in Schrod. infra.* 3. Others to such parts of the cranium as are separated while the person is alive. “Cranium contra epilepsiam tanquam specificum commendatur, in quo cerebrum totum consumptum & liquidum redditum, quale suspensorium, aut rotæ impositorum, cujus liquoris irroratione cranium vires acquirit majores. Si frustula cranii de homine sano, adhuc in vivis constituto, qui olim vel cæsim, vel globo plumbeo in cranio læsus fuit, haberi possent, majoris essent virtutis. Prout notus mihi fuit Juvenis iste Hallensis, cujus mentionem fecit Freitagius, in Horstii Obs. l. 2. qui ex bombardâ mosqueta plumbeo globo tactus in vertice, ubi sutura sagittalis cum lambdoïde concurrat; hic senex tandem factus, de particulis istis ossium, de cranio evulsum, quorum No. 85. pondere fere quadrantis libræ fuere, ad parentum desiderium multis gratificabatur & opitulabatur infantibus epilepticis, sed, quod notandum, non sine cephalalgia ipsum semper post peractam illorum distributionem infestante.” *Hoffm. in Schrod. 612.* A credible story indeed! 4. Others to the cranium only when prepared by repeated levigations with cephalic waters, (such as aquæ florum lilii convalli, tiliæ; pæoniæ, ceraforum nigrorum) and exsiccations successively. *Vid. Pharm. Aug. Zwelferi, p. 414.* While, 5. There are who think only the ossa triquetra, found sometimes in the futures, of any use in this disease: “Qui omnem operam perdiderant in indagando remedio epilepsiæ universali, tandem venerunt ad cranium humanum calcinatum. Verum cum & ipsum destitueret illos, invenerunt latibulum, non totum id facit, sed os triquetrum, quod in quibusdam calvariis est, in laxa illa futura quæ λαιβοειδος dicitur. Eum in finem multa Turcarum capita aperta fuere a doctoribus castrensibus, quo anno (1595.) Strigonium fuit captum. Sed & pauciora inventa sunt, & nullius peculiaris affectus.” *Hoffm. p. 519.* Hence I infer *cranium esse nullius usus in epilepsia*; no better than a hog’s skull: and as it is thrown out of the pulvis ad guttetam, it ought to be expelled the *M. M.* however much the French use it.

S E C T. III.

Hartshorn, calcined and prepared, may be given in substance, like chalk, to ʒj. or ʒij. in infusion or decoction ad libitum. It is used in the decoctum album utrumque. And from the crude horn are distilled a volatile salt and spirit, and an empyreumatic oil: the remaining carbo. calcined to whiteness in an open fire is the *C. C. C.* You

You have the process in *our Pharm.* p. 157; and some judicious observations on it in *Lewis's Pharm.* p. 263—269: to which I refer you; and only add, that old blanched horse bones, hoofs, hair, &c. afford as good volatile salt, as hartshorn, which now perhaps is little employed that way.

Sal volatile C. C. or rather simple sal C. C. *offic.* differs not in virtues or strength from sal volatile salis ammoniaci. The spiritus C. C. if as strong as it ought to be, is only the phlegma impregnated with as much of the salt as it can dissolve. . . . Common water, in a temperate air, dissolves about half its own weight of sal C. C. (vide *Boyle's Experim. and Observ. Phys.* p. 151.) So the dose is easily adjusted. "Sal C. C. datur a gr. v. ad ʒʒ. *Schrodero*: "a gr. iij. ad ʒj. *Le Mort*: a gr. vj. ad xij. vel ʒj. *Maetso, Col. hym. Leid.* "162. a gr. vj. ad gr. xvj, *Lemerio*." "The dose is from gr. iij. to xij. xv. "or xx." *Quincy's Pharm.* p. 331.

Oleum C. C. *offic.* is an acrid, empyreumatic, nauseous oil; called sudorific, and outwardly anodyne; and commended inwardly where sudorifics are indicated; and for rheumatic pains, the gout, &c. outwardly. Vid. *Van Swieten in Aphorif. Cel. Boerhaavii*, Vol. I. p. 638. It is of an abominable taste and smell, and may do as well as burnt feathers held to the nose in hysteric fits. "Ingrati valdè est saporis, unde minus in usum venit. Externè vero doloribus podagricis & arthriticis illinitum prodest. Eisdem etiam vires cum sale volatili obtinet. Dosis a gut. ij. ad xij." *Le Mort*. "Dosis olei gut. v. aut vj. plerumque cum aliis sudorificis." *Margrav. Col. Chym. Leid.* p. 163. Vide *Lem. Chym.* p. 792 ad 804. *Boerb. Chem.* ii. 354—370. Nugamur paululum.

"In physic no figure of speech is allowable, which carries off the mind from the images and close representations of the thing in description . . . (!) "For instance, what can a man form in his own mind from this explanation of *Dr. Fuller's* of the operation of hysterics? "Fetid medicines take off hysteric fits by handling the spirits roughly, and driving and dispersing them. For when they grow mutinous and unequally dispersed, running in tumultuous crouds in some places, and leaving others almost ungarisoned; and so either intermit their duty within the precincts of the brain or præcordia, or else do it perversely: then the best course is to send such a stern remedy among them as may use severe discipline, and lash and scourge them, till they are glad to leave their disorders, and run to their proper posts, and fall to their charge again, &c." *Quincy's Pharm.* Pref. p. ix. Vide *Ful. hystericum. Ful. Phar.*

"The salt of hartshorn extremely rouzes the spirits, and contributes to their regular motions. It is of an infinite service sometimes at the close of an unmerciful fever, which has burned up the vitals, and tore the constitution quite out of frame, so that life is as a glimmering snuff, which may tenderly be cherished into vigour again: herein it supplies the parched fibres with fresh fluid suited to their exigencies, and helps to keep on the main springs and motions of life, till the enemy is critically discharged, which otherwise might languish, and at last stand still." *Quincy's Pharm.* p. 330. I leave you to judge which is most figurative, and whose figures are most just. But how a caustic salt should tenderly cherish burnt up vitals, or supply fresh fluid to the parched fibres, I own I do not understand.

"Carbo,

“Carbo, a destillatione cornu cervini, restans, redactus in pulverem, jejuno homini datus, anthelminticum præbet optimum.” *Boerb. Chem. ii. p. 359.* Vide *Van Swieten in B. Aphor. Vol. I. p. 638, 666, and 742.*

E B U R.

S E C T. I.

Ebur, Dens Elephanti, *offic.* Ivory or Elephant's Tooth—is a long round horn, growing one on each side of the Elephant's upper jaw, of the colour and consistence of a solid bone, without taste or smell.

Elephas, *offic.* Dale 405. Schrod. 808. Elephas, *Charlet. Exerc. p. 4.* Elephantus, *Gesn. Quad. 17. Aldrov. Quad. 418. Ionst. Quad. 17. R. Syn. Quad. 131—142.* The Elephant. “Vel ab Hebraico Alaph, discere, quod docilitate reliqua animalia superet, nomen habet: vel ab Eleph, bos, quia magnum est animal.” *Charlet. l. c.* “Elephantos Italia primum vidit, Pyrrhi regis bello, & bovis Lucas appellavit, in Lucanis visos. A. U. 472.” *Plin. l. 8. c. 6.*

It is the largest of all quadrupeds, being sometimes fifteen feet high, with horns six feet long, and a long trunk which serves instead of hands. One of its horns will sometimes weigh more than 160 pounds. Travellers relate many wonderful stories of the docility and sagacity of this huge animal. With *Ebur* we shall conjoin two other substances, though little used, yea of little use, in medicine, viz. *Dens Apri*, and *Dens Monocerotos*.

1. Dens Apri, *offic.* The Wild-Boar's Tooth, is sometimes six or seven inches long, crooked, describing sometimes more than a semicircle; very hard, of the grain of ivory, and are its weapons, two growing on each side of the lower jaw.

Aper, *offic.* Dale 404. Schrod. 792. Aper, *Gesn. Quad. 918. Aldrov. Quad. bisulc. 1013. Ionst. Quad. 74. Charlet. Exerc. 13.* Sus agrestis sive Aper, *R. Syn. Quad. 96.* The Wild Boar, or Wild Swine. “Sus, ūs, a Swine, cujus varia occurrunt nomina, viz. Porcus, χοῖρος, a Hog; Scropha, γρομφας, an old Sow; Verres, a Boar; Aper, a Wild Boar; Maialis, Verres castratus, a gelt Hog or Barrow Pig.” *Charlet. l. c.* vide *Ibidem* quæ ex carne, &c. conficiuntur. It is a very fierce animal, in many things differing from the Tame Swine. *R. Syn. Quad. &c.*

2. Dens Monocerotis, Cornu Unicornis, *offic.* The Horn of the Unicorn fish. This is nine or ten feet long, round, tapering, and as it were twisted, of the colour, grain, and consistence of ivory: it grows out of the left side of the upper jaw of a large fish, called

Monoceros, Unicornu, *offic.* Dale 379. Unicornu marinum. *Worm. Mus. 252.* Unicornu, sive Cornu Monocerotis, *Park. Theat. 1611.* Monoceros, Unicornu marinum, *Charlet. pisc. 47.* Monoceros, piscis è genere cetaceo, Narhual islandi., *R. Syn. pisc. 11.* The Unicorn fish, or Narhual. “Septentrionalibus dicitur Narhual, a cadaveribus quibus vescitur; Nar enim piscis cadaver dicitur. . . In freto Davis haud rara hæc animalia; & circa Groenlandiam. *Worm. l. c.* This fish is sometimes very large. *Tulpius* (Obs.

(Obs. l. 4. c. 59.) describes one eighteen feet long, and twelve broad; with a horn nine feet long, of which $7\frac{1}{2}$ feet were without the jaw. *Wormius* describes another.

For what the Reem S. S. translated unicorn, *μονοκερως*, *Numb.* xxiii. v. 22. and *Deut.* xxxiii. v. 17, &c. is, consult *Patr. Comm.* i. p. 667. and p. 900: by which it appears not to be the Rhinoceros; far less this fish; though its horn only is kept for it in the cabinets of the curious.—De Unicornu scripsere *A. Baccius*, *J. B. Sylvaticus*, *P. L. Sacksius*, *W. Gabelchoverus*, *C. Bartholinus*, *A. Denfingius*, &c.

S E C T. II.

The gelly of ivory is of the same nature with that of hartshorn. Whether the other two teeth will yield any I know not. Volatile salt, spirit, and empyreumatic oil may be drawn from them all. I know not that they have many peculiar virtues, though many are given them.

“Ebur refrigerat & siccatur, moderate astringit, incidit, viscera roborat, albas mulierum fluxiones sistit, ictero convenit, lumbricos fugat, diuturnis obstructionibus confert, stomachi dolores, & imbecillitatem abigit, epilepsiae medetur, melancholiam arcet, putredini ac venenis resistit. Adhibetur ejus limatura in infusionibus, quin & pulvis in substantia exhibetur. Dosis ʒß. *Præp.* 1. Ebur ustum, spodium ex ebore vocant. 2. Trochisci de spodio. *N.* Sunt qui Ebur ad fecunditatem commendant: verum cum sit animal paucae prolis, tarde pariens (biennium *sc.* gravidum) potius ad sterilitatem foetusque retentionem facere conjecturatur, quam ad conceptionem promovendam.” *Schrod.* 808. “Elephantini dentis ramentum, paronychias curat impositum. Vim porro stypticam habet.” *Dioscor.* l. 2. c. 61.

“*Officin. nat.* Apri adeps, dens, genitalia, fel, stercus, urina, dens specifice in pleuritide exhibetur; cynanchen (cum oleo lini inunctus, vel & exhibitus) curat. Dosis ʒj. *Præpar.* &c.” Vide *Schrod.* 792.

“Unicornu cornu sudoriferum est, alexipharmacum, ac cordiale. Hinc laudatur adversus venena, morbos contagiosis, &c. Proficuum quoque censetur in epilepsia infantum. Dosis a gr. iv. ad ʒj. & ultra.” *Schrod.* 835. Some authors pretend to prove its extraordinary alexipharmic virtues by experiments on dogs, cats, pigeons, &c. after not only nux vomica, but even arsenic and corrosive sublimate, had been given them. See *Mus. Worm.* p. 252. and *Cornel. Stalpertzii Dissertationem de Monocerote*, in *Mangeti Bibl. Pharm.* ii. 331, &c. At fides sit penes auctores.

L E C T U R E LXXXI.

F E L B O V I S.

S E C T. I.

FEL Bovis vel Tauri, *offic.* The Gall of an Ox or Bull.—This is the thick yellow liquor collected in the gall-bladder, of a very nauseous bitter taste, and fetid smell, unless well dried.

I find

I find in *Hippocrates* Fel Bovis, Capræ, Scorpii marini, suis; making Fel Bovis & Tauri the same: in *Dioscorides*, Fel aquilæ, callionymi piscis, capræ, gallinæ, hyænæ, ovis, perdicis, scorpionis marini, suis, Tauri, testudinis marinæ, urfi: *Galen* adds Fel accipitris. In the *old Lond. Pharm.* were eight kinds of galls, viz. Accipitris, Bovis, capræ, leporis, milvi, suis, Tauri, urfi. In *edit.* 1721. there were only two or three, viz. Bovis, leporis, Tauri: in the *present Lond. Disp.* none at all. Ox-gall may serve for all.

Bos, *offic.* Dale 400. Bos, *Gesn. Quad.* 25. *Adrov. Quad. bisulc.* 13. Bos domesticus, *Ionf. Quad.* 26. *Charlet. Exerc.* 8. *R. Syn. Quad.* 78. The Ox. "Mas Taurus the Bull dicitur; fœmina Vacca, the Cow; Fœtus Vitulus, the Calf. *Usu.* Cornu, fel, jecur, splen, sanguis, medulla, axungia seu oleum ex pedibus, ungulæ, urina, stercus, lapilli, lac, butyrum, caseus, priapus, ossa." Dale 400. è *Schrodero* 793. But the caro, here omitted, is of more use than all the sixteen, lac excepted.

S E C T. II.

Bile is antacid, detergent, and a pretty acrid and cathartic natural sapo; called anthelmintic; and commended inwardly in obstructions of the viscera, jaundice, cachexy, &c. and outwardly for deafness, pains of the ear, and (in ointments and clysters) for costiveness. It is an ingredient in the Unguentum Vermifugum, otherwise now but little used, except to clean pictures, and wash silks and printed calicoes.

The Bile or Gall is one of the most elaborate, most useful, of the animal juices; being a principal instrument in digestion, &c. as appears by the consequences following any obstruction of the cystic duct: and also the most medicinal of them all: but it is so nauseous as not to be easily taken. "Bilis cystica resistit acescentibus; aliaque admistione sui, simili facultate imbuat; saponacea est, abstergit, olea aqua miscibilia reddit, resinas, gummi, tenacia quæque resolvit, attenuat, homogenea facit; nec alcalina nec acida, sed oleo, sale, spiritibus inprimis concrevit aqua dilutis; non combustilis, nisi siccata prius, acerrimus humorum circumductorum corporis. Quare effectus ejus, si chylo fœcibusque affusa miscetur, coneriturque sunt attenuare, resolvere, abstergere, fibras motrices stimulare; diversissima quæque permiscere, acria salina obtundere, coagulata dividere, vias expungere chylo, appetitum excitare, fermenti vicem gerere, cruda coctis assimilare." *Beerh. Instit.* § 99. Obiter.

Here it may be asked, if the cystic bile, mixed with the chyle, enters the lacteals, why is not the chyle, and milk too, bitter? If it is answered, as it acts on and changes the aliments, so it is acted on and changed by them: how comes it then to appear unchanged in the fæces, which are white without it? The fæces may be yellow, and yet not bitter or acrid: and we know swine and dogs eat them. But again, if the bile be thus changed by mixing with the aliments; how comes it so to stimulate the guts, as to keep the belly more open than when the cystic duct is obstructed. Perhaps it keeps the belly open by thinning the fæces and lubricating the intestines, not by stimulating the guts. But then, if that attenuating quality

remain after it is mixed with the aliments, it will remain in the chyle also, and so act on the blood as the bile does in the jaundice. Since therefore no such effect is ever observed, and it is plain that the colour is precipitated in the intestines, it appears to be more than probable that only so much of the bile enters the lacteals as is sufficiently changed, and so is no more bile; and what is not so altered is discharged with the fæces. Since therefore this natural sapo, while acrid, cannot enter the lacteals, no wonder that many other substances, however fluid, as acria, acida, astringentia, &c. are also excluded, till they be sufficiently changed in the primæ viæ; and when that cannot be done, that they are thrown out by the common cloaca.

“ Fel bubulum seu taurinum præstat fere omnium quadrupedum fellibus: “ specificè aurium medetur fufurro, ulceri ac dolori, (mixtum cum lacte muliebri, aut caprino & cum cottone impositum), alvum movet (in clysteribus). “ . . Tinctura fellis tauri. R Fella taurorum, sensim in sole exiccata, cum sp. vini extrahe. Cosmeticum est insigne ad miraculum usque albedinem “ gratissimum concilians. Illinitur, relinquiturque illita per triduum, quatuor- “ duumve, ita tamen, ne aëri libero sese exponant, post eluatur aliquoties, “ aqua florum fabarum, nenuphar, poligonati, & simul. *Hartm. in Croll.*” *Schrod.* 794.

ICHTHYOCOLLA.

S E C T. I.

Ichthyocolla, *offic.* Isinglass—is a glue made of some parts of a large fish, dried into thin skins like parchment, and rolled up into wreaths of different figures and sizes, of a white colour, somewhat transparent, and of a viscous insipid taste, and no smell. It comes from Muscovy. The fish of which it is made is either,

1. Ichthyocolla, *offic.* Dale 373. Ichthyocolla, *Gesn. de Aquat.* 50. *Aldrov. de Pisc.* 567. *Bellon. de Aquat.* p. 104. *Rondel. de pisc.* ii. 177. *Raii Ichth.* 244. *Syn. Pis.* 114. *Ionst. H. Pisc.* 100. The Isinglass Fish—Or,

2. Huso, *Pb. Edinb.* 24. Huso Ichthyocolla, *Schrod.* 853. Huso, *Ionst. H. pisc.* 77. Huso Germanorum, *Gesn. de Aquat.* 59. *Aldrov. Pisc. R. Syn. pisc.* 113. Huso, *Charlet. pisc.* 34. The Hausen, or Lax, or perhaps both. I doubt not but it might be made of not a few other fish also.

According to some it is made of the whole fish cut in pieces and decocted into a gelly; but according to others, of the fins, tail, skin, and entrails, (why not and head too, which is more probable, if the body of the fish be good to eat). It lives in the Danube and Volga, and, as some say, perhaps, in the Russian seas, if it be brought from Archangel, as is generally believed. *Vide Sav. Diss.* i. 806.

S E C T. II.

It is an antacid, lubricating, and incrassating animal mucilage, agreeing much with gum tragacantha; and commended in fluxes and hæmorrhages, in heat of urine, &c. but is little used.

“ Siccatur,

“ Siccat, explet, quadantenus molliat. Hinc usus ejus in emplastris glutinantibus. *N.* adhibetur & ad gelanda jura; ex iisdem, addito saccharo cando, excoquitur etiam translucentum & flavum glutinum genus, quod in ore liquefactum, ad chartas glutinandas adhibetur.” *Schrod.* 853.

“ Tanquam temperans & anod. sumitur, in specie in dysenteria, diarrhoea temperanda & incrassanda lymphæ acri; in febribus ardentibus & malignis; in catarrhis falsis, inflammatione faucium & tussi.” *Herm. Cyn.* ii. 58.

It has no acrimony, is very viscid, and keeps long though an animal substance. I have it more than thirty years old, yet no ways spoiled. “ For fining wines, they beat up s. q. of it with wine, and throw it into the cask; where it first forms a skin or fine network on the surface, and then precipitates to the bottom, carrying along with it all the grosser parts of the liquor: so that the filtre may, in this case, be said to pass though the liquor, and not the liquor through the filtre.” *Douglas's Geoff.* p. 383. A notable discovery!

L A P I S B E Z O A R.

S E C T. I.

1. Bezoar, Bezoar orientalis, Lapis Bezoar, *off.* Lapis Bezar. *Garz. Clus. Exot.* 216. *Acostæ lb.* 279. L. Bezaar, *Monar. Clus. Ex.* 8. L. Bezahar, *Perfis Pazahar, Bont. in Garz.* fol. 9. b. L. Bezoar Orientalis, *Worm. Mus.* 110. L. Bezoar Orientalis verus & pretiosus, *Kæmpfer. Amæn. Exot.* p. 398. Oriental Bezoar.—This is a smooth, shining, tunicated, stony concretion, formed in one of the stomachs of a kind of wild goat, of different colours, sizes, and figures, with some heterogeneous substance for a nucleus, without taste or smell. The animal that breeds it is the

Capra sive Gazella bezoardica orientalis *offic.* Dale 402. Caper sive Hircus bezoarticus, *Aldr. Quad. bisulc.* 755. Capra sive Hircus bezoarticus, vel potius pazaharticus, *Ionf. Quad.* 56. Hircus bezoarticus, *Charl. Exerc.* 11. Capri-Cerva orientalis, è qua Lapis Bezoar orientalis, *Schrod.* 801. Fera quædam montana Caprini generis, quam Persæ Pasen, nostrates Capricervam nominant, *Kæmpf. Amæn.* 398. Gazella Indica, cornibus rectis, longissimis, nigris, prope caput tantum annulatis, *R. Syn. Quad.* p. 79. The Bezoar Goat;—which is found in Persia, Golconda, and several other parts of the East-Indies.

That there are such concretions in animals cannot be denied; and that the true Bezoar is a morbid one is certain from the accounts *Bontius, Kæmpfer,* &c. give of it. It is in the old, the lean, the more timorous, male animals that they are most commonly found: and the natives are said to know by their gait whether they have the stone or not. Besides, some mountains (as mount Baarsi in Persia, *Kæmpf.*) make these goats much more subject to this disease than others. But these stones are so much valued in Persia and the Indies, that there is too good reason to believe that none of them come to the shops in Europe.

“ Pretio lapides hic constant admodum caro, siquidem selectiori forma & colore gaudeant. Ex his, qui 5j. pondus obtinent, a gemmariis Tumano, sive quindecim uncialibus (15 crowns) veneunt. Quod vero pretium, ex-

Y y y 2

“ empla

“emplo unionum, dispari affurgit proportione ponderis, ita ut omnem ali-
 “quando æstimationem exsuperet. Ex lapidis raritate & prætio facile colli-
 “gimus, Bezoarticos, quibus in pharmacopœis Europæis utimur, non esse
 “Persicos, vel ex eorum numero, qui, a Capris bezoarticis, Pasen nomen
 “fortiuntur; sed vel ex aliis animalibus, vel sub alio cœlo degentibus de-
 “promptos & suppositos.” *Kæmpf. Amœn.* 403; where he mentions several
 spurious sorts.

Many marks of the true Bezoar are given by authors; but unluckily they do not agree among themselves. *Dale* refers to *Schroder* for them; though all the nine notæ bonitatis in *Schroder* are condemned by *Kæmpfer* except the fifth, which is this. “Si lapis humectatus, & calci vel muro affrictus, calcem
 “colore viridi tingat: si lapis calce viva, cui admista aqua, inunctus, paulo
 “post flavescat: si lapis chartæ Creta oblitæ affrictus viridem inducat lineam:
 “si pulvis cum calce viva mixtus, colorem ex pallido virentem referat, (quod
 “tamen non de omnibus verum esse potest).” *Schrod.* p. 801. “Such stones
 “as are smoothest, small, and strike a deep green upon white paper that has
 “been rubbed over first with chalk, which is a sure way of trying them, are
 “to be preferred.” *Quinc. Ph.* 163. “Notam legitimi lapidis profitentur, si
 “volæ manus cinere aspersæ, vel Creta oblitæ affrictus, lineam inducat lu-
 “team, vel ex luteo viridantem. Hæc illis Lydius est, quo veritatem simul
 “& bonitatem explorant.” *Kæmpf. Amœn.* p. 401. where he says also, “Pro
 “genuinis habeo eos, qui inter resinæ & lapidis substantiam ita ambigunt ut
 “contusi in acido nitri vel salis spiritu dissolvantur, ac menstruum colore satis
 “rubente, simul ac virtute sua imbuant:” and that as for the colours of them, the most esteemed are “viridantes, cœrulei, vel in alterutrum colorem nigri-
 “cantes:” and, p. 392. that the stone which his companion took out of the
 animal “erat policularis longitudinis, figuræ ad æsem cylindraceæ, nigricans &
 “glaberrimus, non amplius scrupulum pendens.” *Savary, Dict.* i. 327. says
 “It is of no matter what figure the Bezoar be of, neither of what colour,
 “but the more common is the olive colour.” . . . “Ex primo circa mate-
 “riam contentam flamine, efformandi lapidis figura pender.” *Kæmpf. Amœn.*
 401.

Now the chief criterion of the Bezoar being the colour it gives to absorbent earths, there is little doubt but that it may be easily counterfeited, as the low price of it shews it is. The following marks of its being genuine deserve notice: “Probatur Bezoar, si fricando imprimat cerussæ chartæ impositæ
 “colorem ex viridi fulvum; deinde si acus candens eum non penetret: si ejus
 “pulvis odore accedat ad ambram griseam; si aquæ tepidæ per noctem im-
 “missus, ejus limpiditatem non mutaverit nec ipse emollitus aut pondere auctus
 “fuerit.” *Nucl. Belg.* 159.

2. Lapis Bezoar occidentalis, *off.* The occidental Bezoar:—which is commonly larger than the oriental, consisting of much thicker coats or crusts, of a coarser grain, of an ash colour, sometimes clouded with a dark brown, of different sizes and figures, with a nucleus, without taste or smell, found in the stomachs of some American animals, particularly that which is called

Cervus minor Americanus, Bezoarticus *off.* *Dale* 403. Capri Cerva occi-
 dentalis, *Schrod.* 802. Cuguacu-ete, *Marcg.* 235. Cuguacu-apara, *Ejusdem*
 live mas & foemina, *R. Syn. Quad.* p. 90. “Animal ipsum titulo Capreoli

“ marini Ionstono depingitur, tab. 33.” ait *Raius*, l. c. “ Animal mas a Pifone (edit. 1658.) p. 98. bene depingitur.” *Dale*, l. c. *Mazama seu Cervus*, *Hernand.* 324. The lesser American Deer, or Bezoar Deer of Peru.

“ This Bezoar is made up of several laminæ, or crusts like the former, but thicker much, and being broke appears as if it had been sublimed, in that one sees in it a great many little needles shooting like those of salt of lead. The outside is very smooth, and of a reddish-grey colour.” *Pomet. Edit.* 1748. p. 12. “ Nuperrime mihi ex Carolina australi transmissus est a pronepote meo Lapis Bezoar, qui in Cervi supracitati ventriculo inventus est, magnitudinis ovi columbini; accrevit 4. distinctis laminis, fusci coloris, nucleo magnæ glandis Americanæ, & omnes nuclei istius impressiones intus habuit, quod Lapidem genuinum esse, mihi plene persuasit,” *Dale*, p. 403. Does not its texture give ground to suspect it to be a mineral production?

Bezoar comes from the Persian name *Pasahr*, *Kæmpf. Amæn.* 398. The Persians call it *Pa-zahar*, *Pa* signifying *contra*, and *Zahar venenum*, *Bont. in Garz.* f. 10. *Bochart* derives it from the Persian word *Bed*, *remedium*, and *Zahar*, *venenum*. *Charlet. Exerc.* 1. “ Philosophi nomen petunt ab Hebræo *Bahal*, quod *dominium*, & Persico *Sahr*, quod *venenum* significat, & Lapidem veneni domitorem vocant. Sed hæc ficta derivatio.” *Kæmpf. Amæn.* 398.

Bezoar was introduced into physic by the Arabians; and perhaps by *Rasis*, who died in 932. æt. 80. at least in his *Continens*, he describes it, and extols its virtues, preferring it even to the theriaca; as quoted by *Matth.* p. 940, *Monard. de Lap. Bezoar.* and *Clus. Exot.* p. 10. where, p. 9. *Serapio* (qui flor. circa 890.) *Avicenna* (qui obiit 1036.) *Avenzoar* (qui flor. circa 1100.) and many other Arabians are quoted. This *Dr. Friend* did not observe, when he wrote that *Avenzoar's* ordering Bezoar in the jaundice was the first time he found it used by way of medicine, or any history of it described. vid. *Hist.* ii. 106.

As for the Occidental Bezoar, *Nic. Monardes Hispanensis* is the first who mentions it, in his *Hist. Sim. N. orbis*, printed in Spanish in 1571 and 1580, and in Latin by *Clusius* (in ejus *Exoticis*, where, p. 327, it is called *Lapis Bezoar Peruanus*). To which he adds a description of three he had from *Sir Francis Drake*; as also of some others, with the figures of three large ones.

S E C T. II.

The Oriental Bezoar is called cordial, nervine, sudorific, alexipharmic, &c. and commended in the vertigo, melancholy, palpitatio cordis, syncope, jaundice, colic, stone, dysentery, obstructis mensibus, partu difficili; but for poisons, malignant fevers, pestilence, in an especial manner. It may be called good for every disease, where either the physician needs to do nothing, or knows not what to do. The oriental and occidental Bezoars, were it not for the colour, might be used indifferently.

“ Lapis Bezoar *orientalis* corroborat, sudores ciēt, alexipharmacus est, ideoque utilis in vertigine, epilepsia, lipothymia, palpit. cordis, ictero, colica, dysenteria, vermicatione, calculo, mensibus obstructis, partu difficili, melancholia; præcipuè autem in peste, febribus malignis, venenis assumptis.

“ Quin

"Quin & extrinsecus adhiberi poterit in scrophulis apertis, cancro ulcerato, & simil. Dosis a gr. iij. ad xij." *Schrod.* p. 802.

"Lapis Bezoar *occidentalis*, iisdem viribus celebris est cum orientali, cujus tamen bonitati non parum cedit. Hinc utilis compertus est, in affectibus cordis, venenis, febribus pestilentialibus, quartana, (cujus symptomata mitigat), melancholia, morbis diuturnis, lumbricis, epilepsia, & similibus. Nec minus & extrinsecus convenit in vulneribus venenatis (inspersus). Dosis a gr. vj. ad xx. *N.* peculiare habet, quod alvum quoque nonnihil moveat (*Monard*)," *Schrod.* p. 802. *Monardes* concludes his account of it thus: "Breviter hoc lapide uti solemus in omnibus diuturnis & difficilibus morbis, in quibus medicamenta vulgaria nihil profuere, eoque magna cum utilitate, aut saltem sine noxa." *Clus. Exot.* p. 328.

1. The Bezoars have neither taste nor smell, are indissoluble in, and hurtful to, the animals that breed them, and do not absorb vegetable acids, or the sp. vitrioli. "Neither the western nor eastern Bezoar stir at all with ol. vitrioli. The western Bezoar with sp. nitri makes a very little thin froth, and that's all, and that it doth very slowly: but oriental Bezoar with spirit of nitre, after some time, maketh a very great effervescence, froth, elevation, noise and steams (as if you poured ol. vitrioli upon sal tartari) till it be wholly dissolved, and turned to almost a blood red." Thus *Grew on Mixtures* (in *An. Pl.*) p. 237. "Spiritus nitri, rectif. ʒj. soon dissolves intirely ocul. cancrorum ʒiv. gr. ix; but only Bezoar orient. ʒiij. and very slowly too; and of Bez. occident. ʒj. gr. lx, and sooner than the oriental: spiritus salis ʒj. dissolves ocul. cancr. ʒiij; Bez. orient. gr. xlvi; Bez. occident. gr. li. and both very slowly." *Homburg. Mem. Acad.* 1700. p. 81. But, according to *Dr. Fred. Slare's Experiments*, neither verjuice, vinegar, oil of vitriol, strong or diluted, spirit of salt, nor spirit of nitre, had any effect on the oriental Bezoar. See his *Observations on Bezoar stones* (edit. *Lond.* 1715.) p. 1, &c. It consists but of forty-seven pages; yet in it he has enough, both from observations and testimonies, to prove it useless, and also factitious. Besides, the different events of the experiments made by these three candid authors strongly confirm that Bezoar is not a genuine animal concretion, but factitious, of different kinds, so that we know not what it is — 2. Mr. *Leuwenhoek* says Bezoar by calcination loses two thirds of its weight: that its chemical oil coagulates the blood; but its spirit dilutes the blood, and separates the red globules into the constituent smaller ones: which an infusion of it in water did as well. Vide *Bib. Pharm.* i. 416. That is, water does as well as any of them. For if it lose of its weight in water, "falsum ac adulterinum esse lapidem" *audacter dicito*," says *Bontius in Garz.* fol. 10. a. — 3. Its virtues are not confirmed by any experiment, yea, so far as I can find, such as have been made with the stone itself have proved it rather useless. *Amb. Parè* (in his works, edit. *Paris* 1585, l. 21. c. 44. p. 800.) writes, That a person of quality having presented the king of France with a Bezoar stone brought from Spain, which he asserted was a certain antidote against all sorts of poisons; *Parè* was called, who, after reasoning whether there could be such an universal antidote, advised to make the experiment on a criminal. Accordingly one condemned to be hanged next day willingly consented the experiment should be made on him, took poison, and after it the Bezoar. Nevertheless, and although

though he drank plenty of water, and a demifextier (¾vij.) of oil, after violent torture, he died most miserably in about seven hours after, saying he had much better have ended his days on the gibbet. On which the king ordered the Bezoar Stone to be thrown in the fire. The poison was corrosive sublimate: though *Kæmpfer*, in order to save the honour of the stone, says it was arsenic. “Non enim omnes Bezoartici Lapides æque sunt virtuosī, ac alexipharmacī; & qui sunt, facultatem non tam adversus venenum minerale, quam animale & vegetabile exserunt, quale misero non fuerat propinatum.” *Amæn.* p. 402. But how can we know the most efficacious but by trial? And many such have been made even in natural diseases with as little success. Vide *Bont.* in *Garz.* fol. 10. a & b. *Casp. Hoffman.* p. 525. and *Slare’s Observations*, where among others it is observed, that the late queen Mary took Bez. ʒß. in the small-pox without any relief, for she died in the time of the eruption. “I am informed by a friend to the grandee of the faculty, that he has got above 50000*l.* by prescribing Gascoin powder, though I am persuaded that, if you asked him what are the ingredients it contains, he would not be able to tell.” *Slare,* p. 21.

“Quantum ad hyperbolicas hujus lapidis virtutes, ac facultates portentosas, non tantas in eo, mille experientiis edoctus inveni. . . Quoque id magis credatis, lapides hi, miseris hircis ac capris tam molesti sunt, quam hominibus lapides vesicæ ac renum.” *Bontius*, l. c. And in the following page he prefers the Calculus humanus to them, and even to the Lapis porcinus also.

“Sunt mihi suspecta quæcunque de isto lapide Stentorea voce prædicantur a pharmacopœis. . . D. Saxonia, præceptor meus, aliquando publice dicebat, se initio praxeos suæ usurpasse quidem; verum postea didicisse, Bezoar, extra omnem adulterii suspensionem, quippe quem nobiles Veneti ipsi, manibus suis exemerint e ventriculo animalis sui, nihil secisse. Hæc ratio fuit hæcenus mihi, qui nunquam usurparim, nec postea uti velle animus sit. Sunt etiam nonnulli quidem impostores, qui perfricta fronte audent mira polliceri de ejus facultatibus ad promovendam variolarum expulsionem, & ut Arabice loquuntur, ad roborandum cor, adversus tantam malignitatem: sed quæcunque male feriat isti effutiant, mera sunt ægrorum somnia, & pura putamendacia: neque enim plus potest iste lapis, in talium morborum curatione, quam calx aut cinis.” *Hoffm.* p. 525.

But physicians are sometimes obliged to prescribe something, when they ought not: in such cases one may solemnly trifle, and order Bezoar, gr. j. ij. iij. &c. provided the patient’s purse can well bear to pay for gratifying the (fancy or) imagination; for the price is the only objection against ʒß or ʒj. “Datur a ʒj. ad ʒj. nisi pretium obstaret.” *Herman. Cyn.* ii. 34.

L A P. C A N C R O R U M.

S E C T. I.

Oculi Cancrorum, *offic.* Crab’s Eyes—are white hard stony substances, about the bigness of peas, but of different sizes, some scarce weighing one grain,

grain, others ten or twelve, round and convex on one side, and a little hollow on the other, without taste or smell, said to be found in the

Astacus fluviatilis offic. Dale 367. *Astacus fluviatilis.* *Gesn. Aquat.* 104. *Aldrov. de Aquat. Exang.* 129. *Ionf. Exang.* 15. *Charlet. Exer.* 56. *Merr. pin.* 192. *Canmarus.* *Bellon. de Pisc.* 355. Cancer, *Schrod.* 849. The Cray-fish, Cray-fish, or Crevise.

These stones are found in the stomach of this animal (they say also in crabs, and lobsters) before it casts its shell in June or July, when it renews also its stomach, one on each side. The new stomach, which is formed without the old, by degrees first digesting the old stomach, and then the Lapides, reserves no other nourishment for many days (27 circiter, secundum *Helmont*) A wonderful but necessary renovation! Vide *Helmont De Lithiasi*, c. 7. § 31 and 32. p. 53. *Geoffroy, Mem. Acad.* 1709. p. 19. *Mr. Reaumur, Mem. Acad.* 1718. p. 333.—They are brought to us commonly from Muscovy or Holland.

“Istorum sæpe occurrit genus fascitium ex cimolia alba in illam formam confectum, quod pro illis venditur, sed fraus istum frangendo, detegi potest, namque veri Cancrorum Oculi laminati sunt in parte gibbosa, quæ fascitii carent.” Dale 367. Vide *Charas, Pbar. Roy.* p. 797. See also a late account of them by *Dr. James Mounsey, Phil. Transf.* N^o. 486. p. 176. “These concretions (says he) called Crabs-eyes are found in Cray-fish, two in each, one on either side of the anterior and inferior part of the stomach, generated about a point lying between the coats thereof. The flat or concave side lies next the internal coat, which is very thin and clear, though strong and horny; and the convex is covered by the fleshy and softer coats of the stomach, whose fibres make impressions on its surface. It grows by degrees lamellatim, and is supplied with juices through sudamina opening on the internal surface of the outer coat; the inner gives resistance only, hence concave on one side; and the first remarkable scale (whereon all the others are formed) may be perceived in the centre, the brims or circumference of many of the rest being very apparent. At the time these stones are not to be found in the animal, there are little circular spots, somewhat opake, and whiter than the rest of the stomach, to be perceived in their place; nearly opposite to which are tenacious mucilaginous substances, formed like little placentulæ, and called by some the glands of the brain: these are larger and more perceptible when the stones are wanting, but never become stones. They do not cast their stones with their shells, which they shed every spring; but a little before or after their casting their shells, the stones break through the internal coat of the stomach, and, being broken by its three ferrated teeth, are dissolved in a few days. . . They eat the old shells immediately after shedding them. There are fishers for Cray-fish on account of the stones only. . . The price comes to a groat or sixpence a pound. Great quantities come from Astracan, where are got the largest.” —*Dr. J. M.* is one of the physicians to the *Czarina's* armies.

S E C T. II.

They are absorbent like chalk; called diuretic, sudorific, alexipharmic; and commended in the stone, colics, cardialgias, all sorts of fevers, &c. They may be given to ʒj.

“Re-

“ Refrigerant, siccant, absterunt, calculum atterunt, tartarum & sanguinem coagulatum resolvunt. Hinc usus magni in nephritide, pleuritide, asthmate, dolore colico, &c. sive crudi tritique assumantur, sive usti, & præparati; inserviunt itidem dentibus abstergendis.” *Schrod.* 850.

They dissolve in and sweeten acids very soon. Vid. *Mr. Homberg, Mem. Acad.* 1700. p. 81. *Charas, l. c.* says they yield a volatile salt, and empyreumatic oil, like other animal substances. They are prepared by levigation. If genuine, are they any better than their testa or putamina? Calcined they become calx viva, and have then a better claim to a diuretic virtue than when only prepared *l. c.*

Many suspect that they are for the most part factitious, made up of testaceous powders, &c. I infused Lapidum ʒij. (No. 32.) in aq. bullientis ʒvj: after some days maceration the water was a little wheyish, and somewhat aromatised; and the stones, when dried, had lost of their weight only gr. ij. but were as hard as ever. Infused twenty days in alcohol vini their weight was nothing diminished, nor was any change made in their colour or consistence. After calcination in a crucible for two hours they weighed about ʒiv. were very friable, many black within and finely lamellate (so that I could number nine or ten lamellæ with glasses); and though they did not heat water, or fall to lime in it, not being thoroughly calcined, yet they made it good lime-water. Hence they appeared to be genuine.

LAPIS MANATI.

S E C T. I.

Lapis Manati seu Os Manati offic. The Sea-Cow Stones.—These are of the colour and consistence of ivory, of an irregular figure, of different sizes, and without taste or smell, formed in the head of the large amphibious animal called

Manati offic. Dale 406. Manati Indorum, *Ald. de Pisc.* 728. *Ionf. Pisc.* 157. Manati, Phocæ genus, *Clus. Exot.* 133. Manati, *Belgis.* Vacca Marina, *Charlet. Pis.* 49. Manati seu Vacca Marina; *R. Syn. Quad.* 193. *Sloan. Hist. Jam.* ii. 329. The Sea-Cow.

It is found in the American ocean, about Hispaniola, &c. has two feet like hands (whence called by the Spaniards Manati). N. B. “ Hispani omnium quadrupedum anteriores pedes, manus appellant.” *Clus. Exot.* p. 134: where are several wonderful things related concerning this biped. Some say it has two stones in its head; others say four; others, that these stones are the ossa petrosa. It has a head somewhat like a cow, and feeds ashore on herbs. It is viviparous, the females suckling their two calves with their two dugs. “ Hic piscis lutræ prope formam referens, 35 pedes longus, 12 crassus est, capite & cauda bovem referens, exiguis oculis, pelle dura & pilosa coloris Veneti; pedes duos elephantinis similes habet. Fœminæ ejus generis ut Vaccæ catulos pariunt, eosque gemino ubere alunt; ut Hieron. Benzon scribit.” *Charl. l. c.*

S E C T. II.

They seem to be of the same nature with the unicorn; but are chiefly commended for the colic and gravel. They are prepared by calcination and levigation, and given to ʒj.

“Lapis præparatus fit ex calcinato, seu cremato. *Vires.* Summe commendatur ad calculos renum & vesicæ comminuendos, dolores nephriticos ac colicos sanandos. Dosis ʒj. & ultra. *N.* Sunt qui ad ʒj. ascendunt.” *Schrod.* p. 851. *Pomet & Lemery* say they are emetic, and the last gives them only to gr. xij. *Alb.* in *MS.* observes that they are reckoned antispasmodic. I can say nothing of them, as I never heard of their being used.

L A P I S S E R P E N T I S.

S E C T. I.

The Serpent's Stone is a hard porous flat oval substance, about the bigness of the thumb nail, thicker in the middle than about the sides, pretty smooth, of different colours, and very bibulous, brought from the East-Indies. Many think it altogether factitious, and made by the Bramines (vide *Tavernier*, *Harris's Collect.* ii. 375); others that it is a natural stone found in the head of the

Serpens Indicus offic. *Dale* 395. *Serpentis* genus. coronatum seu diadematè insignitum (*Lusitani* Cobras de Capelo, nos *Regulum* dicere possumus) maximè noxium, *Garzia Clus. Exot.* 214. *Serpens Indicus* coronatus, diadematè seu conspicillo insignitus, *Lusitanis* Cobras de Capello dictus, *Garz. Naia, Zeylan. R. Syn. Quad.* 330. The Indian hooded or crowned Serpent, common in Ceylon, Malabar, &c. Of this opinion was *Kircher*, *Thevenot*, *Mr. Boyle*, &c. vide *Dale* 395; who thinks there is both a native or genuine Serpent's Stone, and also a factitious one.

S E C T. II.

It is called alexipharmic, inwardly taken; and is said to cure venomous bites, applied to the wound outwardly, by sucking out the poison.

You have enough of its virtues in *Dale*; as also experiments wherein it succeeded, externally applied; and wherein it failed; with his way of accounting for both. For my part I am entirely of *Dr. Mead's* opinion, “That these stones, by reason of their spongy and porous texture, may readily adhere to any moistened part, as they do to the tongue, and imbibe whatsoever humidity they meet with; and thus may draw out some part of the poison;” (and perhaps sometimes the whole): vide *Mead on poisons*, *Edit.* 1702. p. 27. and *Edit.* iii. 1745. p. 44; in the last of which the passage is much contracted; thus, “They will indeed, when applied, stick to the wound for some time, being, as appears from their make, not natural but factitious bodies, compounded most probably of calcined bones and some testaceous
“sub-

“ substances mixt together: but when they drop off are found to have imbibed nothing of the venom.” I scraped a little of one of these stones into sp. vitrioli, but could observe no ebullition or solution for two days; though some time after it was dissolved. It is made an *Os calcinatum* in the *Paris Dispensatory*.

MANDIBULA LUCII.

SECT. I.

Lucius offic. Dale 373. *Lucius*, *Gesn. de Aquat.* 500. *Aldrov. de Pisc.* 630. *Jonst. de Pisc.* 109. *Charlet. Pisc.* 42. *Merr. Pinax.* 190. *R. Syn. Pisc.* 112. The Pike, or Pickerel.

This is a very voracious fish, and common in our rivers and lakes. “ *Vada petunt cum parturiunt; ac sæpenumero singulas fœminas mares 12, 13, aut 14 sequuntur.*” *Charlet. l. c.*

“ *Officin. Nat.* Fel, cor, mandibula, ossiculum cruciforme, axungia, ova.” *Schrod.* 854. “ *Ufu.* Mandibula, seu inferior maxilla, & axungia.” Dale 373. The Mandibula is retained in our Pharmacopœia.

SECT. II.

It is perhaps somewhat absorbent, if powdered; though, when whole, sp. aceti makes very little impression on it in eight or ten days: but it is no better than other fish bones. It is however commended in the pleurisy, stone, fluor albus, difficult labour, &c.

“ *Mandibula exiccat, abstergit. Hinc datur in pleuritide, seu specificum, confert itidem, ut & reliqua capitis ossicula, in calculo, fluore albo, mulierum partu difficili. Extrinsecus sistit (cinis) synoviam, vulnera inveterata mundificat, hæmorrhoides exiccat.*” *Schrod.* p. 850: *Quem vide pro reliquis. Credat qui vult.*

MARGARITÆ.

SECT. I.

Margaritæ, Perlæ, Uniones offic. Pearls.—These are hard shining concretions, of different colours, figures, and sizes, without taste or smell, found in several bivalve shell-fish, especially in the

Mater Perlarum offic. Dale 366. *Concha Margaritifera Aldrov. Exang.* 418. *Jonst. Exang. Aquat.* 41. *Charlet. Pisc.* 64. *Concha Margaritifera, plerisque; Berberis antiquis Indis dicta, List. H. Conch.* 3. No. 56. *Concha, mater unionum dicta, aut Margaritifera, Bonan.* 93. 11. n. 1. The Pearl-Oyster, or Mother-of-Pearl, generally found in the Mediterranean sea, &c.

Pearls are found also in oysters, muscles, nacre fish, &c. and are so far from being “ *e rore cœlesti genitæ,*” (vide *Plin.* l. 9. c. 35. p. 221. l. 39.) that they are the disease of the fish that breeds them, formed of the same substance

with the shell (vide *Mr. Reaumur's* observations on the *Pinna marina*, *Mem. Acad.* 1717. p. 227); and are just such concretions as the bezoars and calculi are in other animals. The finer the shell is, the finer also is the Pearl as to its water, or colour and lustre. The same species of fish is more subject to this stone in some seas and some rivers than in others; the old more than the young: and while some of the same species, in the same sea or river, have no Pearls in them, others will have two or more; yea sometimes so many as to hinder the shutting of the shell, and so choak the fish.

Pearls are tunicated, or composed of lamellæ inclosing one another: and though they are beautifully imitated, yet they cannot be counterfeited so as to deceive the most common observer. They are numbered among gems; and valued according to their water, figure, and magnitude. In 1633 the king of Persia paid an Arab for a pearl 2000 tomans = 1472800 livres, then equal to 109096 pounds sterling. For an account of the value of pearls, the most famous pearl-fisheries, and whatever concerns them, as a branch of commerce, see *Sav. Dist.* ii. 1049—1054. For medicinal use I think them all alike, and no better than the shell that breeds them. The Mother-of-Pearl shell is sometimes vastly larger than any Oyster-shell. “Hæc interdum tam grandis in India invenitur, ut ferant in mari Borneo inventam pondo septem & quadraginta librarum.” *Charlet. Pisc.* 64.

S E C T. II.

They are absorbent, like crabs-eyes; and used the same way: are called cordial and alexipharmic; and commended for low spirits, melancholy, consumption, pestilence. The dose is to ʒß. or ʒj. if not too dear. They require accurate levigation: all other preparations are useless.

N. B. “Cordiale præbent nobilissimum, quo balsamus vitæ oppressus, virefque exolutæ, insigniter recreantur, ac confortantur; proinde venenis, pesti, & putredini resistunt, animum exhilarant. Et hujus rei gratia, in tantum ascenderunt honorem, ut vel agonisantium extrema recreatio communiter inde expetatur.” *Schrod.* p. 348 ad 351. where you have plenty of præparata: of which I say the same as of the præparata è corallio.

L E C T U R E LXXXII.

M O S C H U S.

S E C T. I.

MOSCHUS *offic.* Musk—is a grumous unctuous substance, not unlike clotted blood; of a blackish colour, warm bitterish taste, and very fragrant sweet smell, at a distance, or in a very small quantity, otherwise rank and fetid, found in a bag situated between the umbilicus and pudenda of the animal called

Animal

Animal moschiferum *offic. Dale* 404. Capreolus Moschi, *Gesn. Quad.* 695. *Grew's Rarit. R. S.* p. 21. Capra Moschus, *Aldrov. Quad. bisulc.* 743. *Jorst. Quad.* 55. Capra Moschi, aliis Cervus odoratus, *Charlet. Exer.* 10. "Animal moschiferum neque e caprino, neque e cervino genere esse videtur; cornua enim non habet, & an ruminet incertum; dentibus tamen incisoriis in superiore mandibula caret, ruminantium in modum; at dentes ibidem exsertos (*tusks*) habet velut porcus." *R. Syn. Quad.* 127.

It is a native of Tartary, China, and several countries of the East Indies. It is described by *Dr. Grew*, l. c. and from him in *R. Syn. Quad.* who, l. c. says, "The Musk bladder or bag is about three inches long, two over, and swelling out from his belly one and a half, standing before his groin about as much." Vide also *Lucæ Schroëckii Historiam Moschi, Augustæ Vindel.* 1682. in 8vo. or *Bib. Ph.* ii. p. 343—423. But this seems not to be the only Musk animal: for

There is an anatomical description of a Musk animal by *Mr. Peyronnie, Mem. Acad.* 1731. p. 624 ad 652. which differs (as he observes) from the Gazella of Scroëckius; from the Musk-rat of Canada, described *Mem. Acad.* 1725. and comes nearer to a kind of Pole-cat (*fouine*) called Genette; but differs from the two Civet animals described by *Mr. Perrault*. Its sack was situated between the anus and pudenda; and could contain about half an ounce of musk. Vide *locum*.

Musk is a valuable commodity, and very liable to adulteration, and that several ways, a small quantity of it giving a very strong smell to a great deal of other stuff mixed with it; but such as have smelled genuine Musk will not be much deceived in examining what is mixed. Vide *R. Syn. Quad.* l. c. and for what concerns trading in Musk, *Sav. Di&.* ii. 837. "If a small quantity of good Musk be infused in *sp. vini* cold for a few days, it imparts to the menstruum a deep coloured but not red tinge: this tincture is of a faint and no very pleasing odour, almost as if there was no Musk in it: nevertheless a single drop of it communicates, to a pint or even a quart of sack, a rich musky scent. From *Boyle's Essay on the Mechanical Production of tastes and odours.*" *Lewis's Pharm.* 79. This I think the best way of examining whether the Musk is genuine or not. Newman informs us, "that *sp. vini* dissolves ten parts out of thirty of Musk, and that water takes up twelve; that water elevates its smell in distillation, while pure spirit brings over nothing." *N. Disp.* p. 162. It is just such a substance, produced the same way in, and is of the same use to, the Musk animal, that Castor and Civet are to the animals that afford them. It is neither the matter of an abscess nor corrupted blood, whatever authors may have dreamed concerning it; (vid. *Pomet, Lemery, Dale, &c.*) but a natural liquor, secreted by proper glands; and no doubt of use to the creature itself: and what that is may be in some measure guessed by the situation of its saccus.

The Greek *μοσχος* signifies vitulus, also talea; and in *Aëtius*, (the first who mentions it as a medicine) *this* perfume.

S E C T. II.

Musk is attenuant, cordial, and diaphoretic; and may be said to comfort the spirits, or invigorate all the functions. It is also called alexipharmic, cephalic,

cephalic, nervine, and anodyne; and commended for low spirits, palpitation of the heart, colic, syncope, hysteric fits, barrenness, & ubicunque natura languet; agreeing in virtues with ambergrise (fere): but for a long time it has not been much used, because its scent is thought hurtful to vapourish persons.

"Calfacit 2. siccat, attenuat, discutit, cordialis est & alexipharmacus, hinc & cephalicus. *Ufus præcipui* in omnibus affectionibus cordis, palpitatione (potus ac illitus). Spiritus nimirum vitales fovet, suscitatur, recreatur: hinc in affectionibus capitis ac nervorum, a frigore & crassissimis humoribus oriundis, tum & in dolore colico, &c. Externe detergit tenues oculorum albugines, & humiditas defluxiones exiccat, ad venerem concitat, auditum imminutum restituit, (auribus inditum cum cottone). Dosis gr. iv. v. *Præp.* Species Diamosch, dulces, & amaræ. Confectio Moschardina; & oleum *μοσχα-iov.*" *Schrod.* p. 826.

1. It is somewhat bitter and a little warm on the tongue, but excessively odoriferous, inasmuch that any quantity of it smelled to near is strongly fetid and disagreeable; but at a distance, or a very little of it mixed with other substances, it is a rich and pleasant perfume. "Saporis est subacris, amaricantis; odoris fragrantis & grati." *Herm. Cyn.* ii. 39. "Saporis est subacris & subamaricantis; odoris fragrantis & grati." *Dale* 404. Substantiæ est subpinguis, inflammabilis, grumosa, coloris castanei; saporis amaricantis & subacris; odoris fragrantissimi, & quibusdam insupportabilis, præcipue hystericis." *Nucl. Belg.* 199. "It is of a strong and unsupportable smell, and of a bitter taste." *Pomet*, (Ed. 1748.) ii. 15. "It is of a strong smell, and bitter taste; it is almost all sulphur, or oil, and volatile salt; it contains very little earth; its scent is troublesome and disagreeable, when any quantity is smelled to; but sweet and pleasant when only a few grains are mixed with a great deal of other substances." *Lem. Diet.* 361. — 2. It is almost incredible how large a quantity of liquids a single grain of Musk will perfume, and how long it will retain it. A clean cork, which stopped a phial in which there was Musk, which it seemed never to have touched, in 1712, smelled of Musk more than twenty years after. How subtle must its parts be! how volatile! and I had almost said how fixed! — 3. "Sanguinem impetuosum admodum reddit, & hæmorrhagias narium facile excitat. Novi ipse subjectum quoddam, quod quotiescunque Moscho infecta vel bellaria vel potulenta assumit, hæmorrhagia narium corripitur." *Boeckl. in Herm. Cyn.* ii. 41. Hence it seems not only agreeably to stimulate, or rather tickle, the nerves, but also remarkably to rarify the blood. It has long ago been observed that, however hurtful the smell of perfumes may be to hysteric people, the use of them inwardly has had the contrary effect. And sure I am, since the disuse of them, vapourish diseases have not been less frequent.

But Musk seems to be coming again into vogue. For we have a Julepum à Moscho in the *Ph. Lond.* 96. And in the *Phil. Transf.* No. 474. a p. 213 ad 225. there is an account of some very extraordinary effects of it, in convulsive and other obstinate diseases; and that not only taken by the mouth, but also when given in a clyster. Dr. Wall of Worcester there says, that he knew it successful in the rabies, the hiccup, subfultus tendinum or catchings in the tendons, spasms and convulsions (in clyster), pains in the belly (eodem modo), vomiting, inability to swallow; also that, given to gr. x. and upwards,

wards, it never fails to produce a mild diaphoresis, without heating or giving any uneasiness: that it eases pain, raises the spirits, and, after the sweat breaks out, usually procures a refreshing sleep. He gave it to gr. xvj. He says under gr. vj. he never found much effect from it. See also an account of an extraordinary effect of it, by *Dr. Parsons, Phil. Transf.* No. 478. p. 75. for *December 1745*. It was a miserable hiccup, intermitting pulse, delirium, &c. Dosis ad gr. v. *Schrod.* ad gr. ii. *Nucl. Belg.* The dose is from gr. ß to gr. iv. *Lemery*. "Among the Chinese the usual dose is the tenth part of an ounce," (=48 grains) according to *Dr. Wall*, l. c. from *P. Du Halde*.

M U M I A.

S E C T. I.

Mumia offic. Mummy—is a hard black shining substance, said to be of a subacid bitterish resinous taste, and fragrant smell, by *Dale* and *Herm.* It seems to be nothing but a mixture of human or some other blood with some bituminous or resinous substance.

"Mumia communiter quatuor denotat. 1. Mumiam Arabum, quæ est liquamen, seu liquor concretus, exudans in sepulchro e cadaveribus, aloë, myrrha, balsamoque conditis. 2. Ægyptiorum, quæ est liquamen ex cadaveribus pissasphalt. conditis. Nimirum hoc condiebantur cadavera vilioris fortis, adeoque & ipsamet cadavera nonnunquam eo modo condita prostant. 3. Pissasphaltum factitium, i. e. mixtum pici bitumen, quod pro Mumia venditant. 4. Cadaver sub arena solis æstu torrefactum. Fitque in Hammoniorum regione, quæ est inter Cyrenarum regionem & Alexandriam, ubi arenarum fyrtes, ventorum turbine sublatæ, incautos viatores obruunt; unde horum cadavera, a flagrante solis æstu, torrentur & arescunt. His, 5. & Mumia recentiorum addi poterit, when, after directing how to make it of the flesh of some sturdy young malefactor, violenta morte intercepti, which he prefers) he adds, utpote in quibus metu fumus soluti, quem incutit Renodæus, Mumiam officinarum nihil aliud esse perhibens, quam expressum putridi cadaveris succum inspissatum, ideoque magno mortalium damno divendi." *Schrod.* p. 818. Vide *Matth. Epist.* p. 217.

But the genuine, at least most valued, Mumies are the carcases of the embalmed ancient Egyptians, found uncorrupted in their sepulchres, or catacombs, not far from Cairo. Such are rare in Europe, and costly; because they are not only esteemed as curiosities, but also imagined to have wonderful virtues. "It is supposed that all that is sold at Paris is but a factitious Mummy, so to speak, the workmanship of certain Jews, who, knowing the value put on the Egyptian Mumies by the Europeans, counterfeit them, by drying cadavers in an oven, after having prepared them with myrrh, caballine aloes, asphalt. pitch, and other common or bad gums. If this is true, it ought to put the use of so miserable a drug out of conceit." *Sav. Diss.* ii. 760.

Mumia is a corruption of Amomea, from Amomum used of old in the most precious ointments. Vide *Theoph. hist.* l. 9. c. 7. p. 1004. which thence took the same name. Vide supra Amomum, which the Arabians call Hamama, and the Turks Amama. *Bod. in Theoph.* 1014.

S E C T. II.

Mummies are, in my opinion, detestable stuff, and unworthy of a place in any dispensatory: although they are called antiseptic, sudorific, alexipharmic; said to dissolve coagulated blood; and are commended for the vertigo, apoplexy, palsy, epilepsy, convulsive and hysteric disorders, contusions, gangrenes, pleurifies, &c. “Mumiam nunquam interne exhiberem,” says *Herman*. The dose is made ʒj. or ʒij.

“Hominis cadaver integrum, carove, *officinis* Mumia titulo venit. Hæc “resolvit sanguinem coagulatum (assumpta ad ʒij.) conferreque dicitur purgationi capitis, punctioni lienis, tussi, inflationi corporis, mensibus obstructis, aliisque affectibus uterinis, & similibus. Extrinsecus adhibetur vulneribus consolidandis.” *Schrod.* p. 818. In the two following pages you have a variety of præparata. But,

1. Suppose the Mummy a part of one of the Egyptian kings, embalmed 3000 years ago, his flesh is nothing better than a beggar's; and as the substances then used in embalming could not cure the disease of which he died, (which might be pestilential for ought we know) and no medicine can be supposed so long to retain its virtues; so the antiseptic virtues of these balsams must, at least, have been much weakened, if not intirely overcome, by the natural putrescency of a dead body; and so the Mummy long ago turned to a real caput mortuum. — 2. It is not possible to know that any of the Mummies, even those brought from Egypt, were embalmed after the ancient Egyptian manner. They may have been dried on the gibbet, or in the sands; or be Mummies of the Jews making. And though they were, it is not to be imagined that they were all kings or nobles embalmed after the richest and most sumptuous manner: it is even much if they are the carcases of the poorer sort, for the preparation of which pissasphaltum (with salt probably) sufficed. Hence *Serapio's* Mumia is *Dioscorides's* Pissasphaltum: but his “Mumia sepulchrorum fit e myrrha, aloë, aliisque rebus his additis, & humiditate quam exudant humana corpora.” Vide *Matth. Epist.* p. 217. and in *Dioscor.* p. 112. See also *Bellonius, Obs.* l. 2. c. 47. p. 117. and *Thevenot, Harris's Collect.* ii. 425. Can the Pissasphaltum, &c. be improved by the sanies of a corps? But I believe very few now have Francis I. king of France his taste. “Corporum in Ægypto conditorum, i. e. nostræ Mumia usus tantus est in Gallia, ut rex Franciscus, literarum restitutor, nusquam proficisceretur quin penui ejus præfecti semper, cum rhabarbaro, illud in pyxide deferrent, atque etiam ipse met gestare solitus esset.” *Bellon. Obs.* l. 2. c. 47. p. 118. If fables delight you, you have abundance of them in *Pomet*, ii. p. 2—5. especially in the history of the beetle. Need I add—3. That human flesh is no better than, if so good as, a hog's; nor cannibals so wholesome as that of other people.

S A N G U I S H I R C I N U S.

S E C T. I.

Sanguis Hirci *offic.* is the arterial blood of a Buck-Goat, dried hard, of a blackish colour, and saltish rank taste. “Hirci mediocris ætatis (quadrimi,
4
“Schrod.

Schrod.), ætate ineunte, emittatur sanguis, apertâ arteriâ idoneâ. Sanguis “vase mundo exceptus, exsicceetur calore solis vel clibani modice calefacti.” *Ph. Edinb.* p. 35. See it more circumstantially directed in *Schrod.* p. 799. or *Zwelf. Ph. Aug.* 520.

“Hircum, cujus cruorem in officinis scholæ præscribunt (& passim ovillus pro hircino venundatur) jubent prius diureticis alendum. . . . Ego vero pro cruore Hircum suspendo cornibus, & crura posteriora reflecto ad cornua; testes abscindo, & recepto inde cruore, exlanguem dimitto pro lanione. Hic cruor autem siccatus est instar vitri, difficillimæque triturationis, atque longissimè ab hircino sanguine officinarum differens. Assumptus autem ʒj. pondere, confestim sopit & curat pleuritidem, &c. absque venæsectione: nec te deferet unquam.” *Helmont. Sextupl. Aliment. hum. digestio*, § 74, 75, & 76. p. 213. Vide etiam *Furcus pleura. (ej. autoris)* § 32. p. 382. where he says, “Sunt mea remedia, quæ neminem in pleuritide & peripneumonia derelinquunt; pulvis de virga cervi vel tauri, vel cruor hirci, vel succus cichorei sylvestris, flores papaveris sylvestris, ac plura talia. Potissimum laudo cruorem hirci, non equidem venalem, sed hircum suspendo cornibus, &c.” Though this preparation is whimsical, he chooses a properer Latin word for it than sanguis. “Sanguis alit venas, cruor est e corpore fusus.” So that he accurately calls it cruor, not sanguis hirci. Hircus is the buck, capra the she-goat, the male (castrated or) gelded is called caper, and a kid hædus: yet caper sometimes denotes the male.

Caper, *effic.* The Goat, *Dale* 401. *Aldrov. Quad.* 619. *Charl. Ex.* 9. Capra & Hircus domestici, *Ionf. Quad.* 46. *Gesn. Quad.* 265. Capra domestica, *R. Syn. Anim. Quad.* p. 77.

S E C T. II.

It is alcalescent, and perhaps diaphoretic; is said to dissolve coagulated blood; called alexipharmic; and commended for the angina, pleurisy, gravel, dysentery, &c. The dose is ʒj. But I think it good for nothing, in this quantity at least.

“Sanguis hircinus habetur alexipharmacus, obstruit, dysentericis convenit, sanguinem concretum resolvit, (siccatus) calculum atterit. Extrinsecus tu mores maturat.” *Schrod.* 799. where see the præparata and virtues attributed to the Cornu, Lien, Medulla, Sevum, Lac, Lapilli (in ventriculis & felle reperti), Stercus, Urina, Vesica, Omentum, Pellis, & Fel.

But though this is somewhat rank tasted (as is the flesh) and glutinous, sheep's blood is also glutinous; and both of them are eaten by pounds, without any observably different effect: what then can be expected from ʒj? Whether there was any physical reason, for prohibiting the eating of blood under the Law, I cannot determine; but sure I am that boiled blood is not easily digested; and when eaten may be found, at least a considerable part of it, in the fæces alvinæ, little altered; and also that many virtues were attributed to the blood of various animals by the ancients without sufficient reason. Vide *Dioscor.* l. 2. c. 97. p. 118. (who, *Alexiph.* c. 25. p. 411. makes bull's blood a strong poison) and *Galen Simpl.* l. 10. fol. 72, 73. The former, *l. c.* says, “Sanguis anseris, anatis, hædi, utiliter in antidota misceatur. Palumbi

“ autem, turturis, columbæ, ac perdicis, recentibus oculorum vulneribus,
 “ iisdem sugillatis ac lusciosis illinitur. . . Hirci autem, capræ, cervi, & lepo-
 “ ris sanguis inassatus sartagine & assumptus, dysenterias & cœliacorum pro-
 “ fluvia sistit. In vino vero potus, contra toxica efficax est. . . Caninus com-
 “ mode propinatur a cane rabioso demorsis, iisque qui toxicum hauserunt, &c.”
 In the same place you have also virtues attributed to the sanguines testudinis ter-
 restris & marinæ, tauri, equi admissarii, chamæleontis, & fœminæ menstruus.
 —Pudet!

S E R I C U M.

S E C T. I.

Sericum, Sericum crudum, Folliculi Sericei *offic.* Raw silk.—This is a sin-
 gle thread of silk curiously wound up into a hollow clue, for a nidus to the
 Bombyx or Silk-worm, until, by a double metamorphosis, it become a papilio.

Bombyx *offic.* Dale 357. Bombyx, *Aldrov. Insect* 278. *Iconf. Insect.* 114. *Le-
 mery's Diët.* p. 84. Bombyx domesticus, *Schrod.* 863. “ Vermis lanificus
 “ Alb. Mag.” *Schrod.* Bombyx, *Matth.* 231. The Silk-worm.

Of small ova, like poppy-seeds, in May or June, are hatched little worms,
 erucæ, or bombyces, which are fed by mulberry-leaves for about six weeks,
 when they become as thick as a swan's quill, about two inches long, and
 give over eating: having moulted four times; and being conveniently dis-
 posed of in paper cones, furnished with branches, or otherwise accommodated
 for their work, they begin to squeeze through a little trunk, between their
 mouth and stomach, a strong slender and scarcely visible thread; which each,
 artfully warping it round itself, forms into a nest, in size and figure resembling
 a pigeon's egg; sometimes white and sometimes yellow. This thread is said
 by some to be 930 feet, by others two French leagues long; and yet is finish-
 ed and plaistered within in ten days. After which it changes its form, and
 from an eruca becomes an aurelia, chrysalis, or nympa, called the bean-worm,
 being of a yellowish colour, and about the bigness of a small bean; stirring
 so little, that it appears to be dead for five days, during which time the silk
 is reeled off. From such folliculi, or balls, as are saved for propagating the
 species, the chrysalises, being metamorphosed into papilios or butterflies
 (having sullied the silk with their exuviæ and superfluous moisture) eat their
 way out, frisk and flutter about till they meet with others of a different sex,
 if to be had: then, interveniente coitu triduo, the male dies; the female
 surviving only so long as to have time to lay her eggs, which, though 300
 or 500 in number, she accomplishes in a day or two. So that from their hatch-
 ing to their death there are only sixty or seventy days.

The silk manufacture was introduced into Asia minor and Greece about the
 time of Justinian, (qui imperavit ab an. 527 ad 565); into Sicily and Cala-
 bria about the year 1130, on *K. Roger's* conquest of Athens, &c. and *Lewis XI.*
 first brought it into France about 1470, and in 1480 endued the manufacturers
 with extensive privileges. Vide *Sav. Diët.* ii. 1912 and 1603.

“ Primi sunt hominum qui noscantur, serēs, lanicio sylvarum nobiles,
 “ perfusam aqua depectentes frondium canitiem: unde geminus fœminis
 “ nostris

“ nostris labor, redordiendi fila, rursusque texendi. Tam multiplici opere,
 “ tam longinquo orbe petitur, ut in publico matrona transluceat.” *Plin.* l. 6.
 c. 17. p. 119. “ Tiberius Cæsar edicto promulgavit ne quis vir seracio velli-
 “ mento indutus foras prodiret. *Bod. in Theoph.* p. 425 & 426.

S E C T. II.

It is not only useless in medicine, but, being indigestible, may be hurtful.
Vide Kermes.

“ *Officin.* 1. Bombyces integri. 2. Sericum, *i. e.* Textura Bombycina.
 “ 3. Folliculi Sericei. Bombyces exiccati & pulverisati insperguntur vertici
 “ capitis ad arcendam vertiginem & convulsionem. Bombycina textura (ut
 “ & folliculi) est caliditate & frigiditate temperata, (*al. cal. 1.*) siccatur 1. cor-
 “ roborat spiritus vitales, animales & naturales. Uritur quandoque, quo sic-
 “ cior reddita lævigetur, quandoque decoctis admiscetur. Verum præstat
 “ crudum, & solummodo incisam, adhibere. *N.* Caveatur a folliculis alvi
 “ spurcitie scædatis, vel in quibus adhuc *Necydalus* latitat mortuus, & vermi-
 “ bus exesus.” *Schrod.* p. 863. è *Matthiolo*.

If crude or raw silk have any virtues, it owes them to the viscous dissolvable substance wherewith the inner surface of the balls is cemented, or to the spurcitics *Schroder* cautions to beware of; which is but a stinking cordial at best: and if it is good for any thing, the insect certainly is better; for it does not appear to be virulent, (as *Hoffman* on *Schrod.* p. 642. and *Zwelf. Ph. Aug.* 254. make it) since not only birds and poultry eat them, but also sometimes German soldiers. *Vide Ionst. H. Insect.* p. 125. As for the substance of the silk itself, a dog's stomach cannot dissolve it. I knew a dog swallow about a foot length of a ribbon: it came through him in a day or two; and when washed had not a hole in it, but was as tough as ever. But silk yields a great deal of volatile salt. “ Serici crudi ʒxv, analysed, gave salis volatilis ʒij. ʒij, spi-
 “ ritus volatilis ʒiiiss, & carbonis ʒv. ʒv. (so that ʒij. ʒv. were lost if there
 “ was no oil). This volatile spirit rectified, with ol. cinnamomi, makes what
 “ is called guttæ anglicanæ, as I had it from Dr. Lister. *K. Charles II.* pur-
 “ chased the secret from a chymist called G. . .” *Tournef. Mem. Acad.* 1700. p. 90. Here is evidently some error in the quantity of volatile salt: but this is of little consequence, as the dog's stomach could not separate it from the ribbon.

S P E R M A C E T I.

S E C T. I.

Cetus offic. Dale 379. Balæna major, inferiore tantum maxilla dentata, macrocephala, bipennis, *R. Syn. Pisc.* p. 15. Balæna macrocephala, quæ binas tantum pinnas laterales habet. *Sibbaldi Phalenolog.* p. 12. Trompa, *Park.* 1607. Cete admirabile aliud, *Clus. Exot.* 131. Balæna, *Ionst. H. Pisc.* p. 151. *R. Ichthyolog. tab. A .1. fig. 3.* The Parmasitty Whale.—It is a very large fish, sometimes fifty or sixty feet long; (the Dutch call it Pot-walvis): in or about the brain whereof is found the

Sperma ceti offic. which is a white scaly pinguedo, mixed with oil, of a rancid oily taste, and strong smell, whilst crude; but, when refined, of a soft taste, and little smell. It is said to be found sometimes floating on the sea. —A whale, forty-nine feet long, will yield from his head twelve barrels of *Spermaceti* oil. See *Squire Dudley's* account of it, *Phil. Trans.* No. 387. p. 256. or *Abridg.* Vol. VII. p. 424. in his *Essay on the Natural History of Whales*: wherein however there are, in my opinion, some things that want confirmation; as his account of ambergrise; how a whale towed away a forty tun sloop, with the anchor fluke in her nasket, &c.

The refining of *Sperma ceti* (and unrefined it cannot be used) was long a secret, and still is such with many, especially the French: few know how to do it to perfection. The first tolerable account I have seen of it is in *Fr. Hoffman's Clavis in Pharm. Schroder.* (Edit. *Halæ Saxonum* 1675. in 4to.) from a *Dissertatio de Spermate Ceti*, by *M. Etmullerus*, who had it from an expert *Pharmacopæus Hafniensis*. Having thus got the hint, I put the late *Mr. Adam Lindsay*, surgeon, on making the experiment; and practice soon enabled us to shorten and improve the process; which in short is thus performed:

Take the crude *Spermaceti*, and if oily put it into a hair bag, suspend it till the common oil drop from it, at the same time gently expressing it; then, having prepared a mixture of strong soap-lye p. i. and water p. iii. or iv. (according as the mass is more or less foul) put the *Spermaceti* into it cold, and work, wash, or knead, and mix it well with your hands; and when it has stood thus a day, put all again into the (washed) hair-bag, that the liquor may drain off: the mass remaining in the bag wash with clean cold water, and dry in a clean well-aired place. If by colour, taste, and smell, it appears fine enough, nothing remains but to melt it in hot water, stirring it well, that no part of the liquor remain adhering; and then let it cool into a cake. If it be still too oily, foul, or rancid, the same process must be repeated, either with the same or fresh liquor, once or again; and sometimes it is necessary to bring it even to boiling over the fire. Thus it may be had either in fine semipellucid white cakes, or in shining snow-like scales (by bruising it in a mortar) which will keep good, neither rancid to the taste nor smell, for a dozen of years: and thus also old yellow rancid *Spermaceti* may be recovered, both in colour and taste. “*Quoad saporem, butyrum quasi æmulatur, nisi quod aliquid rancoris linguæ imprimat, prout recentius vel vetustius fuerit, variat. Odor nullus fere est, nisi etiam quodammodo rancidus.*” *Hoffman. in Schroder. l. c.* What I had prepared as above was far less rancid than the best I ever met with in the shops.

Some call *Spermaceti* *Ambra alba*; others *Flos salis aut maris*, supposing it to be the *ἀλωαυθός* *Græcorum*. “*Flos salis e Nilo quidem flumine defluit, sed & stagnis quibusdam innatat. Assumendus qui croci colorem imitatur, & odore quodammodo est ingratiore, veluti garum: interdum etiam magis graveolens, gustu mordaciore, ac subpinguis. Fucatus autem rubrica, aut grumofus improbatur. Præterea sincerus non nisi oleo resolvitur: adulteratus nonnulla ex parte etiam aqua diluitur. . . . Acris est atque igneæ ferventisque naturæ, uti sal.*” *Dioscor. l. 5. c. 129. p. 377.*

N. B. “*April 1, 1741. A Cachalot Whale ran a-ground near the bar of Bayonne, in the river Adour in Gascony. It was forty-nine feet long, twelve*” and

“ and a half at its greatest breadth, and twenty-seven round. It afforded
 “ a prodigious quantity of Spermaceti, which is nothing else but the brain
 “ of this animal prepared. Its brain and cerebellum filled ten hogheads
 “ (barriques) which the preparation commonly reduces to one half, or a
 “ third. There was found in its stomach a large ball, of seven pounds
 “ weight, which was taken for ambergrise, and bought by a merchant for
 “ 650 livres. It was at first pretty soft, of a clear red colour, smelt some-
 “ thing like rotten fish, as well as of ambergrise: but being kept a few
 “ months, it became more brown, and smelled more agreeably of amber-
 “ grise. *Mr. Peyronnie*, who shewed the *compagnie* some of this true or pre-
 “ tended ambergrise, is far from thinking that ambergrise is formed in this
 “ fish: on the contrary he believes, that, if it is sometimes found in the sto-
 “ machs of these animals, it is because they have swallowed it, for they are
 “ very voracious. The rest of the body of this Cachalot was almost nothing
 “ but lard or fat, of which they made a great deal of oil.” *Hist. Academie*,
 1741. p. 35.

S E C T. II.

It is antacid, diaphoretic, and anodyne, relaxing and lubricating the fibres, and blunting the sharpness of the fluids; called pectoral, emollient, and col-
 metic; said to dissolve coagulated blood; inwardly commended in coughs,
 hoarseness, pleurisy, colic, and nephritic pains, grindings, contusions, &c.
 and outwardly for pains, redness of the face, hardness of the mammaræ from
 coagulated milk, pits left by the small-pox, and other foulnesses of the skin.
 “ *Eligatur candidum, pingue, recens, non rancidum, &c. Vires. Humeſcat,*
 “ *reſolvit, anodynum eſt; proin vulgaris uſus in coagulati ſanguinis reſolutione*
 “ *a caſu vel ſimiliter contracti; in torminibus colicis ſedandis, ut & in tor-*
 “ *minibus ventris infantum mitigandis, in tuſſi, tartaroque pulmonum de-*
 “ *mulcendo. Doſis a ʒj. ad ʒj. vel ʒij. Extrinſecus ſunt qui cicatricibus*
 “ *exanthematum illinunt, ut carne eas repleant.*” *Schrod.* p. 516.

1. It is of a ſoft oily ſubviſcid taſte, and no ſmell; no way acrid, if pure.
 “ *Saporis eſt butyracei, & viſcoſi; odoris grati, debilis.*” *Herman. Cyn.* p. ii.
 “ p. 49. “ *Saporis pinguis, & piſcoſi.*” *Dale* 380. “ *Odoris ſubgravis,*
 “ *carnium ferarum fere adiſtar; ſaporis acris, fere ut butyri rancidi.*” *Nucl.*
Belg. p. 73. — 2. It keeps long, and, though an animal ſubſtance, neither
 heat nor alcalies volatilize or putrify it, yea rather ſweeten it; as appears by
 the way of refining it: and it diſſolves in oils, ſpirits, yolks of eggs; and con-
 ſumes intirely in the fire. Some make beautiful candles of it. “ *Nescio quid*
 “ *ſit Sperma ceti. Noſtris tam familiare eſt medicamentum, ut Encelius*
 “ *dicat (2 Metall. 1.) nescire ſe ad quem non morbum utantur Germani.*
 “ *Hinc ſplendidum illud nomen Baldrabi, quod in morbis dubiis, unicum*
 “ *illorum perſugium eſſet.*” *Hoffman.* p. 539.

S E C T. III.

It may be given to ʒij. and more, powdered with ſugar, or in a ſoft egg,
 or any way. It gives name to a lohoch in *our* Diſpenſatory. The Unguen-
 tum

rum album and Linimentum album, *Pharm. Lond.* consist of oil, wax, and Spermaceti; cerusse being omitted. vide *Pemb. Disp.* p. 363 and 372. who says, "In the white ointment, besides neglecting the formality of the oil of roses, the cerusse is omitted, this unguent being often used to the frettings of the skin in young children; and an application of this corroded lead to such tender bodies is not unaccompanied with danger." Their liniment is only softer, p. 372. Is it as effectual in scaldings or frettings of the skin as the old unguentum album?

S T E R C O R A.

S E C T. I.

It is as little necessary as pleasant to rake into dunghills in quest of medicines, though a variety of *Stercora*, and *Urinae* also, have been very early numbered among them. We have about a dozen *Stercora* in the works attributed to *Hippocrates*, fourteen in *Dioscorides*, twenty and upwards in *Galen*, &c. And there is a "Pharmacopœia nova, in qua reposita sunt *Stercora* & *Urinae*, τα ὑπορίστα, pro omnibus totius corporis morbis internis & externis, per facile & optime curandis. Jam primum edita pro pauperibus, militantibus, & omnibus quibus in militia, itineribus, venationibus, rure, solitudine, vel alibi, alia medicamenta non suppetunt, by *Joh. David Rulandus*, Noribergæ 1644, in 12mo." *Lind. renov.* p. 570. In the *Pb. Lond. edit.* 1682, are *Stercora* 12. The *edit.* 1721 has five; but the last edition in 1746 has excluded them altogether. And truly the *M. M.* may well do without them. In the *Pb. Edinb. edit.* 1744, are seven *Stercora*, viz. Anseris, Canis, Columbæ, Equi, Ovis, Pavonis, & Porci; Bovis being omitted, though as much used as any of them, and the least fetid.

As for *Urina*, we find in *Hippoc. De Nat. Mul. (Ed. Foes.)* p. 586. l. 33. *Urina Tauri*; & *De Morb. Mul.* l. 1. p. 632. l. 19, *Urina bubula*, & *Ibid.* p. 621. l. 24. and elsewhere, once and again, *Urina humana*. But they are all used only outwardly. *Dioscorides* has seven or eight; and *Galen* about three or four. The last edition but two of the *Pb. Lond.* had *Urinam Apri*, *Capræ*, *Hominis*, & *Pueri*; which were all thrown out of the next edition. Our Dispensatory retains *Urina Hominis*: but *Urina Vaccina* is more used.

S E C T. II.

They are all pūtrid and consequently antacid, emollient, detergent (altho' very dirty ones) diuretic, and some of them cathartic; and so may do service inwardly in diseases *ab acido & viscido spontaneo*; and outwardly in pains, inflammations, and tumors.—But I know no intention in physic which cannot be as well answered without them, and much more agreeably. *Fucunde sanandum.*

For the virtues of these excrements, consult, if you please, *Schroder*. Tho' if you think it worth while to examine the nature of the dungs and urines of different animals, in order to judge of their virtues, you must enquire into their

their food, way of living, and qualities of their natural liquids and solids. If a simple yielding volatile salt is enough to recommend it, and account for its effects, all of them, being chymically analysed, afford such salts and spirits: and Stercus humanum not less than any of them; which (*venia nasorum*) may be a succedaneum for any of them. And though *Galen* says, "Stercus humanum, ob fœtorem abominandum est," yet he gives an instance, from his own knowledge, of a wonderful cure of a phlegmon gutturis performed by it. Vide *Simpl.* l. 10. fol. 75. H. & 76. B. This is said also to be a specific, and the only remedy for the bite of a particular Indian serpent.

"Stercus (*says Galen*, l. c.) vim habet vel maximè digerentem." See also *Dioscorides*, l. 2. c. 98. p. 119.

An infusion of Sheep's-dung is given in the Small-pox; of Horse-dung in the Rheumatism; of Peacock's-dung in the Epilepsy, &c. and the Aqua & Oleum Stercoris humani are commended by *Matthiolus*, p. 310. for the Epilepsy, Stone, Dropsy, bite of a mad dog or other venomous creatures, inwardly taken; and outwardly for Spots on the Eyes, Ulcers, Cancers, &c. *Dioscorides* says the Stork's dung "comitialibus prodest:" but *Galen* denies it. Is the Stercus Pavonis any better?

Urina Vaccina, called Cow-Tea, and sometimes Aqua omnium florum, (which formerly was a name of Aqua Stercoris Vaccini stillatitia) is frequently drank in May by women, to clear their complexion, &c. It commonly purges by stool, as well as urine, and sometimes vomits. For the rest, vide *Dioscor.* l. 2. c. 99. p. 120. or *Schroder*, who transcribes him, thus, "Pavonis Stercus, proprietate vertiginem & epilepsiam sanat; nimirum exiccatum & pulverisatum (3j.) maceratur per noctem in vino: hinc trajectum per linteum exhibetur, continuando a novilunio usque ad plenilunium aut amplius, si opus sit. Crato miscet cum saccharo & exhibet." *Schrod.* 847.

"Humanum Stercus recens impositum vulnera ab inflammatione vindicat, simul & agglutinat. Siccum vero cum melle perunctum anginosi auxiliari traditur. . . . Cæterum humanum Stercus siccum cum melle subactum, & gutturi impositum, quemadmodum & caninum, anginosi opitulari inter arcana reperimus." *Diosc.* l. 2. c. 98. p. 120. See there enough of dungs: and among the rest a cure for the Sciatica, p. 119. *D. Cap.* 99. is *De Urinis*, and begins thus: "Humanum urinam suam cuique bibere prodest contra viperæ morsus, & lethalia pharmaca, incipientemque hydropem. . . Canina rabidi canis morfibus perfundendis idonea: &c.

I shall now give you some extracts, relative to the subjects last treated of, &c. from *Macquer's Chemie Prat. Tome II.*

1. *Butter* by distillation is resolvable into acidulous phlegm, a thin oil, and a small quantity of a carbo. Vide p. 358.

2. *Cheese*, when new, affords by distillation an acidulous phlegm, a thin light, and a thick heavy oil, and large carbo.—The first phlegm of both is from the remaining serum: but the acid here is in less quantity, and also weaker, than in the former. The carbo could not be reduced to ashes by six hours calcination in a strong open fire, but still flashed with nitre, p. 365.

3. *Whey*

3. *Whey*, first evaporated almost dry and then distilled, gave phlegm, an acid spirit, and thick oil; with a carbo, which moistened in the air, yielded to water, sea-salt, and after calcination gave marks of a fixed alkali, p. 368.

It is here observable, that none of the above yielded any volatile alkali, as do all animal substances besides. Would the chyle yield any? probably it would. Are the animal juices of the chyle separated from the milk in its proper secretory organs? Our author thinks so; (p. 371.) and that in this the milk chiefly differs from the chyle, p. 368.

4. *Blood* contains much phlegm, near seven eighth parts of it being pure water; which being evaporated in *B. M.* and the dried substance distilled per retortam, there rises still some phlegm, but impregnated with a volatile alkali; then a yellow oil, a very penetrating volatile spirit, volatile salt, and at last a pitchy oil; there remaining a carbo which contains some sea salt, but no fixed alkali. No volatile salt can be raised from it by the heat of boiling water.

Hence it follows that the volatile salt, which rises with a greater heat, is either the work of fire, or comes from the decompositum of an ammoniacal salt: for if it existed compleatly formed it would rise almost of itself, and at the first impression of heat; as it does from blood putrified, or any putrified substance, even before the first phlegm. Putrid blood therefore must not be dried before distillation. See p. 374—386; where the author determines, in favour of *M. Homberg*, that there is an acid got from blood; though the proof is but lame. *Vide* p. 383.

5. *Lean Beef* distilled in *B. M.* yields half its weight at least of phlegm; and by increased heat the same principles as blood. (*vide Geoff. Mem.* 1730.) Four ounces of lean beef, often decocted in three chopines of water and evaporated to a moderately solid extract, gave 3j. gr. ij. of volatile salt (in flat crystals parallelipedal) of spirit and oil gr. xxxviii, and of carbo gr. vj, which contained sea salt. The remaining fibres analysed gave (being first dried) volatile spirit, and volatile salt in ramifications, a thick oil, and carbo, which contained no salt, p. 391—5: where see the analysis of ox bones, which yielded more of their principles to water than the flesh did, p. 391.

6. The analysis of *Mutton Suet* agrees much with that of butter, affording a very acid phlegm, thin oil, butter, and a little carbo. By repeated distillations it turns into fluid and permanently limpid oil; but no volatile alkali can be got from it, if freed of all the membranes, flesh, vessels, &c. p. 394.

7. The *Whites of Eggs*, boiled hard, by distillation yield nine tenth-parts of insipid phlegm, a volatile oily spirit, a yellow oil, volatile salt, thick oil, and carbo. The yolks, after, by frying &c. the oil is expressed, yield the same principles with the whites. "Of these two substances the yolk contains the germ of the chick, and is destined to give it birth (*naissance*); the white serves for the nourishment or increase of the chick *une fois formé*." *Vide* p. 397:—(Strange! The contrary of this is true.)

8. *Stercus humanum* distilled *Bal. Mar.* gives an insipid but fetid phlegm; and there will remain in the cucurbite about an eighth part of dry stuff, which by a retort affords volatile spirit, salt, fetid oil, and carbo. Hence it is evident that these excrements are not, compleatly at least, putrified: for all compleatly putrified substances contain a volatile alkali intirely formed and developed, which rises with a heat less than that of boiling water, and mounts up always first in distillation.

Mr.

Mr. Homberg diluted fresh excrements with boiling water, (taking a pint for each ounce) and when cold poured off the liquor, which he evaporated to a pellicle. There were formed in it long crystals, of four, five, and six sides, which he thought might be called their essential salt, flashed like nitre, but burnt more slowly, and with a red flame, containing more oil than common nitre. He distilled it four times. It gave an acrid and acid liquor, a little red oil; but when the oil began to come over, the retort took fire: so that it contained true nitre.

Mr. H. also distilled the Stercus to dryness (in *B. M.*) powdered it, and infused it in six times as much of its phlegm, which he had separated by distillation; which he kept warm in a large cucurbit for six weeks in order to fermentation, and then distilled it in the same *B. M.* drawing off all the aqueous humidity, which had lost almost all its fœtor, which was changed into *une simple odeur fade*. This water he found to be an excellent cosmetic. After this distillation

The residuum in the cucurbit had not only lost its stink, but had an agreeable aromatic smell; and the vessel wherein it was digested, in some time, smelled much of ambergrise. This dried aromatic excrement, distilled in *B. Arenæ*, gave first some phlegm, then an oil as clear as fountain water; and by an increased heat a good deal of red oil; and there remained an easily inflammable carbo.

He distilled also this *matiere fecale* with different substances, as with vitriol and with alum; and observed that the residuums of the distillations with these salts were true Phosphori. See *Mem. Acad.* 1711. and *our Author*, p. 402—416.

9. *Urine* distilled in *B. M.* gives thirty-nine fortieth parts of it of insipid phlegm; but smelling of it; and the dark red residuum, mixed with sand, by an increased heat, some more phlegm, a volatile spirit, a yellow oily liquor, and with it volatile salt, and at last a fetid oil; there remaining a carbo containing some sea salt. The effect of fixed alcalies and *C. viva* on urine, and other animal substances, seems to prove that they contain a neutral salt of the ammoniacal kind.

10. *Volatile salts*, though by rectification rendered white and pure, in time grow yellow, which distilling them with sea-salt and chalk will prevent, according to *Boerhaave*: combining them with the marine acid, and separating them by a fixed alcali, renders them as pure as art can make them, and always the same, from whatever substance they were at first produced, p. 422.

11. (α) *M. Dubamel*, in distilling Sal Ammoniac with Salt of Tartar, and Salt of Kali, both well dried, obtained a quantity of volatile salt equal to, yea and exceeding, that of the Sal Ammoniac made use of: whence he concludes, that the volatile salt volatilised, and raised with it part of the fixed salt employed. (β) When he distilled Sal Ammoniac with Calx viva *non extingta*, without adding any water, he got no volatile spirit, or so small a quantity that it might be reckoned none, and owing to the humidity necessarily contained in the Sal Ammoniac, and what the Calx got from the air, though exposed to it but a very short time: whence he asserts that the volatile spirit, drawn from Sal Ammoniac by means of Calx viva, is liquid only by reason of the water contained in the Calx viva. (γ) He distilled also Sal Ammoniac with Chalk quite dry, and got volatile salt, as well as when fixed salts were employed, which had raised with them part of this earthy intermediate sub-

stance.—Hence he infers, that volatile salt cannot be sublimed from Sal Ammoniac, without carrying along with it a part of the intermediate substance, or something else to which it can unite: that alkaline fixed salts, chalk, and the like, have the first property; but quick-lime the second, being capable only of raising the volatile alkali, when charged with an humidity, which joined to the salt sublimes with it, and so must be in a liquid form. But why does not some of the lime rise as well as some of the other intermediate substances? “Quicklime, says M. Duhamel, is an earth by calcination divested of almost all its humidity, acid, and oil (gras) . . . it is acrid also, and caustic, and strongly attracts moisture: it absorbs acids, and strongly retains them; and, in fine, it so unites with fat substances as to make with them a kind of soap.” Hence he thinks that quick-lime acts not only on the acid of Sal Ammoniac, but also on the *matiere grasse*, which always accompanies and is of the essence with volatile alkalies, and consequently decomposes them; which he proves by this experiment: He took the volatile spirit distilled with quick-lime, and made it pass several times through quick-lime (il l’a repassé plusieurs fois sur de nouvelle chaux vive). The quantity of this spirit was sensibly diminished every time; and the quick-lime was so charged with fat (*graisse*) that not only the vitriolic acid poured on it became very sulphureous, but, when it was calcined in a crucible, it was easy to discover it by the smell of burning grease which it yielded. Fixed alkali salts absorb indeed and retain oily matter (*matieres grasses*) but not so strongly as lime, because never quite deprived of what oil they originally contained; and quick-lime appears to be absolutely free of all oily substances. (See his two experiments confirming this, p. 453.)

To discover whether the Salt of Tartar, and the chalk, raised by the volatile alkali, were really volatilised, and become one with it; or only superficially united; he distilled them in much water, and with the heat of the air; but nothing remained in the bottom of the vessel. Acids had no better success. But exposed dry to the air, covered with gauze only, the fixed part was left after the dissipation of the volatile; and was fixed in the fire. *Vide* p. 444.—458.

T E S T Æ.

S E C T. I.

1. *Dentalium, offic.* *Dentalium, Charlet. Exerc. Pisc.* 63. *Worm. Mus.* 252. *Dentale leve, album, altera extremitate rufescens, Lister. Hist. Conch.* iv. *Seet.* 11. *Nº. 2. Dentales, Gesn. de Aquat.* 345. “*Autales dicuntur alii ejusdem formæ, sed minores, Bonan.* 91. *Dentalium, offic.* The Dog-like-tooth-shell.” *Dale* 362. The Dog-tooth Shell.—This is long, and round, a little arched and tapering, tubular, open at both ends, of a whitish colour, and a little reddish at one end.

“*Tellinis adnasci solent, ut balani aliis crustaceis.*” *Worm.* “*In mari Britannico capiuntur.*” *Dale.* “*Tellina, offic.* The Limpin.” *Dale* 367.

2. *Entalium, offic.* *Autales, Gesn. Aquat.* 345. *Tubulus aut Siphunculus maris, Bonan.* 91. *Dentalium primum & quartum, Aldrov. de Aquat.* 283. *Dentale viride, striatum, maximis striæ raræ, majusculæ, admodum extantes;*

minimis

minimis striæ densæ & tenuiores, *Lister. Hist. Conch. iv. Sect. 11. N^o. 1.* Denticuli Elephantis, *Rumph. 125. tab. 41. 1. Valent. Mus. 187.* Entalium, *offic.* The Entaglia, *Dale 362.* Entalium: *Schrod. 852.*—It is larger than the former every way, deeply striated, and somewhat greenish coloured.

“ Ex India Orientali transfertur. Itali moderni lapides, metalla, lignæ quæcunque lineis aut figuris insculpta, aut etiam cannulata *Entaglio* vocant, unde, & a vocis Dentalii proximitate, Entalii nomen ortum habuisse conjectat erud. D. M. Lister. Qui plura de his desiderat, consulat *Act. Phil. No. 197.*” (p. 641.) *Dale.* “ In officinis officula e capite exempta aselli majoris, pharmacopolis nostris, lapides dentales dicuntur.” *Dale 372.* And the concha venerea, minima, tota alba, nucleum avellanæ non superans magnitudine, *Worm. 252.* in shops sometimes supplies the place of the Dentalium (as in *Schroder* it seems to do) and sometimes of the Entalium.

They, with several other useless substances, are in the Ung. citrinum seu basilicum *Nicolai* (Vide *Zwelf. Pharm. Aug. 345.*) and were retained in the *Lond. Disp.* (wherein were Dentale five concha veneris, & Autale vel Porcellana p. p.) till the edition 1721. when ointment, and shells too, were thrown out. This ointment, with the Dentale and Entale in it, is in *Ph. Aug. Edit. 1684. in folio.*

3. Testa Sepiæ, Os Sepiæ & Sepium, *offic.* The Cuttle-bone.—This is a light spongy friable testaceous substance, sometimes six inches long, two broad, and half an inch thick in the middle, thin at the edges, of a white colour; formed on the back of the Sepia *offic.* Sepia, *Aldrov. Exang. 44. Gesn. Aquat. 851. Charl. Pisc. 51. Ionsf. H. Exang. p. 7.* “ Loligo, Sepia, *Merr. pin. 191.*” Sepia *offic.* *Dale 361.* The Cull, Cuttle, or Cuttle-fish: which is found often on the shore of the Mediterranean sea.

“ Piscis est qui in pedibus habet succum nigerrimum instar atramenti, quem Chineses cum brodio oryzæ vel alterius leguminis inspissant, & formant, & in universum orbem transmittunt, sub nomine atramenti Chinesis.” *Herman. p. 17. Part. 2. Cynosuræ.* With this ink it makes the water muddy when in danger of being taken. “ Sepia vocatur à σῆπω putrefacio; quod atramento, veluti putrida quadam sanie, quam Græci σῆπιδονα vocant, abundet.” *Charlet. l. c.*

4. Testa Ostreæ *offic.* Ostrea major, fulcata; inequaliter utrinque ad cardinem denticulata, *Lister. H. Conch. iii. 20.* Concha satis nota in cænis, Ostrea Latine dicta, non Ostreum, *Bonan. 108. t. 70.* Testaceum, quod Latini Ostreum & Ostream vocant. *Ionsf. H. Exang. Aquat. 44.* Ostreum *offic.* *Dale 365.* The Oister.

“ Peculiariter vero contra leporis marini venena & Ostrea adversantur. Idem videtur, nec potest videri satis dictum de his, cum palma mensarum diu jam tribuatur illis. . . Præcipua habentur spissa, nec saliva sua lubrica, crassitudine potius spectanda quam latitudine. . . Cyzicena majora lucrinis, dulciora Britannicis, suaviora Adultis, acriora Lepticis, &c.” *Plin. l. 32. c. 6. p. 773.*

5. Umbilicus marinus *offic.* Umbilicus marinus, *Worm. 72. Dale 363. Bellon. de Aquat. 430.* “ Quibusdam Umbilicus Veneris; Germanis Meer-bonen, i. e. Faba marina; Cretenses Oculum marinum vocant, quod gestatus oculis prodesse dicatur.” *Worm. l. c.* Sea Bean, or Sea Navel.—This is a roundish flat solid testaceous substance, plain on one side, somewhat con-

vex on the other, with an Umbilicus; of several colours and sizes, formed on the head of the

Cochlea cæolata, *Aldrov. de Exang.* 393. *Ionf. de Exang.* p. 38. t. 12. *Gesn. de Aquat.* 240. *Dale* 363. *Cochlea cæolata*, antonomastice dicta, *Bonan.* 114. The embossed (nonne potius covered) Sea-Snail.

“ In Mari Mediterraneo invenitur. D. J. Raius ipsum piscem vivum in testa sua, hujusmodi testum operculo. Recens e mari extractum Romæ nactus est.” *Dale* 363. “ Habentur palma magnitudinis. Dum cochlea repit, scutum hoc in caput deportat; & dicitur esse ejus roboris, ut licet vir fortis prehendat, nullo modo eripere possit.” *Albin. MS.* *Wormius* had one four inches over the longest way, for it is somewhat oval. I have one of $1\frac{3}{4}$ inch, and some but about half an inch over. “ Testa in aceto macerata, superiore veluti cute, vel crustæ spoliatur, redditurque cochleæ margaritiferae modo splendens, nitida, & unionis modo colorata.” *Ionf. Exang.* p. 38. Vinegar had a contrary effect on the Umbilicus on which I tried it; and spoiled both its colour and smoothness.

S E C T. II.

They are all absorbents, like Crabs-Eyes. We use only the Oyster-Shell, and Cuttle-Bone. They are prepared by levigation. Calcined they become a *Calx viva*. The dose of these (prepared) may be ʒj.

“ Os Sepiæ exiccat, abstergit (pulverisatum vel incineratum) maculis, nevis, scabiei humidæ medetur. Oculis convenit (cum melle cinis inditus) gingivis tumidis subvenit (in dentifriciis) asthmaticis auxilio est (assumptus) gonorrhœam sistit, calculos pellit, urinas movet, pulvis assumptus ʒj. dosi.” *Schrod.* p. 857; who commends the *Ostrea* for pestilential bubos only outwardly. V. p. 855. See also *Plin.* l. 32. c. 6. p. 773. Umbilicus marinus a puellis gestatus illis gratiam & amabilitatem conciliare creditur, earumque morbos avertère, &c.” *Worm.* 73.

“ R Dentale: Tere in pulverem, & exhibe ʒß cum aq. destil. cinnamomi, vel alia, ad absorbenda acida. Versa (viz. Dentali, Entali, Umbil. marinus) in calcem fiunt specificum contra quartanam.” *Herm. Cyn.* ii. p. 38.

U N G U I S.

S E C T. I.

Unguis odoratus, *Blatta Byzantina offic.* *Blatta Byzanzia*, βουζ, *Unguis odoratus*, *Schrod.* 849. *Unguis odoratus*, *Matth.* p. 246. *Blatta Byzantia Arabum.* *Aldrov. Exang.* 346. *Blatta Byzantia* sive *Unguis odoratus.* *Park.* 1573. *Blatta Byzantina, offic.* The Constantinople Sweet-hoof. *Dale*, p. 363. —What the *Onyx* vel *Unguis*, *Conchylia tegumentum*, of *Dioscor.* l. 2. c. 10. p. 91. was I know not. I shew you what *Matthiolum* and some others take for it. *Dale* has said as much of it as I can; and to him I refer you. It is not in use: and indeed I think it useless. You have *Dr. Lister's* conjectures concerning it in the *Phil. Transf.* No. 197. p. 642. When burning it smelled somewhat like castor, says *Dioscorides*. “ Whilst burning it does not smell of

“ castor, but of burnt horns.” *Lem. Diet.* 82. “ Odore gravi aloen Barba-
 “ densæ æmulans.” *Dale*. What I burnt had a strong diffusive smell, some-
 what like that of castor; more like that of burnt horns; but most of all it
 resembled the scent of Barbadoes aloes, mixed with sea-ware; if my nose de-
 ceived me not.

“ Unguis odoratus internè laxat alvum, splenem molliat, vitiososque humo-
 “ res discutit. Externè excitat suffitu fœminas strangulatu uteri oppressas,
 “ comitialesque. In reliquis idem præstare poterit, quod aliæ concharum
 “ testæ.” *Schrod.* 849.

U N G U L A A L C I.

S E C T. I.

Alce offic. Alce, *Ionst. Hist. Quad.* 65. *Aldrov. de Quad.* p. 866. *Gesn. de Quad.* 1. *Cbarl.* (Alces) *Ex.* p. 12. *R. Syn. Anim.* 86. *Dale* 403. The Elk—
 is the largest of the Cervinum genus, with palmed (not branched) horns, and
 a native of Scandinavia, Muscovy, Lithuania. It is thought to be the Onager
 Plinii, *Hoffman.* p. 522. for which I cannot find a reason. The hoof only
 is used.

“ Germanis dicitur Elend, seu Miseria, tum quod singulis diebus morbo
 “ comitali laboret, nec citius ab eo levetur, quam dextri posterioris pedis
 “ Ungulam, auriculæ sinistræ immiserit: tum quod levissimo etiam vulnere
 “ accepto expiret.” *Ionst. Quad.* 65. *Andreas Baccius, Apollonius Menabenus,*
 and *Johannes Wigandus*, have written treatises on this animal. It is Alce,
Alces: Alces, Alcis; or Alces, *Alcæ*. Gr. ἀλκη.

“ In Finlandia Alcen vidi septemdecim palmas altam.” *Schrod.* 791.

S E C T. II.

The Elk's claw is called a specific antiepileptic, both inwardly taken and
 outwardly applied; and it is also commended for all convulsive and hysteric
 disorders. For my part I think Asses hoofs as good.

“ *Officin.* Ungula, ac Nervi Alces, Ungula specificâ virtute celebratur ad-
 “ versus epilepsiam, tum præcavendo, tum curando, idque usu tam interno,
 “ quam externo. Interne propinatur scobs, & præparata subjuncta. Exter-
 “ ne, includitur particula annulo, gestaturque digito, qui minimo proximus
 “ est, ut palmam respiciat: inditur itidem pugno, applicatur pulsui, immit-
 “ titur in aurem sinistram, suspenditur de collo, ut cutim attingat. Dosis ʒß
 “ & ultra ʒj. *N.* Dignoscitur odore, quem gratum suffitu exhibet. Nervi
 “ circumligantur membris spasmo obnoxiiis. *Præpar.* 1. Ungulæ præparatæ,
 “ lege communi. 2. Magisterium. Fit l. c. aceto vel sp. vitrioli, & oleo
 “ tartari. 3. Sunt qui aquam ex medulla cerebri destillatam pro arcano
 “ epileptico habent. 4. Exhibere itidem poterit oleum, liquorem, ac sal
 “ volatile, l. com.” *Schrod.* 791.

1. It is a hard horny substance, without any taste or smell, and probably
 indigestible. I burnt some of it, but could observe no difference betwixt the
 scent

scent of it and of a sheep's claw.—2. The animal itself is said to be epileptic, and to drive away the paroxysms by scratching its ears with the claws of the hinder foot. Granting this to be true, it is but a bad reason for attributing an antiepileptic virtue to the claw; since it often relapses, though it always keeps its hoofs: so that the virtue must be in the scratching, not in the claws: it may be so convulsed as to strike itself, and the strokes may raise it out of the fit. “Hoc animal epilepticum creditur esse, & depellere paroxysmum scalpitu posterioris Ungulæ post aures, unde remedium est factum apud nos tam famigeratum, ut nullus infans sit, qui non gestet in collo, amuleti loco, particulam Ungulæ.” *Hoffman.* p. 522. — 3. It is owned by the advocates for this virtue, that every Elk's hoof has it not. According to *Olaus Magnus* it must be the outer claw of the right hinder foot of a male Elk which has never copulated with a female, cut off from the animal alive, after the middle of August. “Applicatur rectè, (says he) si vel sinistræ manus annulari adponatur: vel annulus ex eadem factus eidem indatur, vel pars unguis sinistræ palmæ imponatur, manusque in pugnum complicitur; vel ejusdem potiuncula in aurem sinistram missa, & aliquamdiu veluti scalpendo moveatur.” *Ions. Quad.* p. 66. If thus it cured, surely the Elk would never have a fit of that disease. “Referunt non quodlibet hujus speciei animal, malo epileptico corripì, nec omnia eadem proprietate prædita esse, sed pro ætate, sexu, tempore, & ipsius etiam Ungulæ ratione, plurimum variare. Fœminæ Ungulam hac facultate nequaquam pollere, sed maris solum, nec pulli, sed adulti; idque eo tempore quo in venerem ferri incipit (inter festum assumptionis Mariæ & nativitatis ejusdem, i. e. inter 4 Julii, & 8 Septembris). Plus etiam Unguibus posterioribus, quam anterioribus tribuunt, & horum quidam pedi (quod vulgatus) dextro, alii sinistro. Sunt qui velint has Ung. ab animali adhuc vivente dicto tempore, præscindendas esse. *And. Bacc. l. de Alce.*” *Schrod.* p. 791. But how can we know that any hoof has all these qualifications? And though it had, what virtue could thus be communicated to it? Do they not smell strong of the mountebank? especially since it is made as efficacious outwardly applied, as taken inwardly. I have no faith in amulets, nor amulet-mongers. Vide *Hoffman. in Schrod. Mangeti*, p. 587. & *ibi citatos.* And—4. As it has not the honour of having been long in reputation, so now it is generally contemned. I do not find it in *Gordon's Liliū Medicinæ* among the remedies for the epilepsy; nor in any author before him: though the Ungulæ Asini have *Dioscorides's* authority for their use in that disease. “Ungulæ Asinorum ustæ (ὄνυχες ὀνών καεντες, &c.) ad dies multos cochlearibus binis potæ comitialibus prodesse narrantur. Oleo vero subactæ strumas discutiunt: inspersæ quoque pernionibus medentur.” *Dioscor.* l. 2. c. 44. *totum*, p. 98. “Asinum hepar inassatum esu comitialibus prodest.” *Dioscor.* l. 2. c. 42. “Lichenes equorum calli sunt circa genua & Ungulas, in earum partium flexu indurati. Li triti & in aceto poti comitialibus mederi traduntur.” *Dioscor.* l. 2. c. 45. p. 99. These lichenes, called verrucæ equinæ commonly, were used inwardly for cancers by *Dr. P. V. Cassumunar.* But the lac of either of these animals is of more use for tender consumptive people, than all their parts are for any disease whatsoever.

Whether Elk's-hoofs or Horse's-bones would make the best anodyne necklaces, let those determine who expect any benefit from either: I do not. “Vallet autem Ungula ad epilepsiam, convulsiones, tetanum, tremores, vertiginem,

“nem, palpitationem cordis, & hystericam passionem, & similes spasmodicos
 “motus.” *Nucl. Belg.* p. 11. Credat, & utatur qui vult. It may be given
 to ʒj. yea ʒj, if you please. It is thrown out of our Pulvis ad Gutteram;
 in which it had a place too long.

Z I B E T H U M.

S E C T. I.

Zibethum offic. Civet—is a soft unctuous substance, of the consistence of butter, white at first, then yellow, and at length brown, of a warm rancid yet aromatic fat taste; and very fetid or very sweet smell, according to its age and quantity; found in a bag situated between the anus and pudenda of an animal, thence called the

Animal Zibethicum *offic.* The Civet-Cat, *Dale*, p. 411. Animal Zibethicum, *R. Syn. Quad.* 178. Animal Zibethi, *Aldrov. de Quad. digit.* 340. *Ionf. de Quad.* 109. *Charl. Exerc.* 20. Catus Zibethinus, *Schrod.* 804. *Hyæna Veterum*, *Ballou. Obs.* l. 2. c. 20. p. 94. The Civet Cat, rather Civet (Dog, Fox, or) Animal.

It is a native of Africa and both the Indies; and has several times been brought to Europe and tamed, though naturally as wild and rapacious as a Fox. By its head, snout, teeth, &c. it appears to be of the canine genus. There is a Treatise by *Petrus Castellus Romanus*, called *Exetasis de Hyæna odorifera Messanæ* 1638. in 4to, & *auélior & figuris æneis adornata Francosurti*, 1668. in 12mo; also in *Ionst. Hist. Quad.* p. 151 ad 163. Many others have written, more or less, about this animal, its sac, perfume, &c. as *Fallopius*, *Bartholinus*, *Perault*, &c. But none perhaps so accurately as *Mr. Morand*, in the *Mem. Acad. R.* 1728. p. 568. “The sac is situated between the anus and pudenda, in both male and female: in figure it resembles two little pears conjoined, with a common opening; being divided into two cavities, a little larger at bottom than towards the neck; each cavity being between two and three inches deep, and both together about as much in breadth.. This sac is covered with the skin, and consists of four coats; first, a pretty strong membranous coat; then a muscular; next a thin membranous and vascular one; and last of all a glandular coat, two lines thick, (*i. e.* $\frac{1}{8}$ inch) consisting of a vast number of glands, and many follicles, or reservoirs of the perfume, filtered in the glands, and conveyed by these reservoirs into the bag, into which they have each a visible opening. Each cavity of the sac contains (*un paquet*) a parcel of a sort of short silk, soaked with the odoriferous oil, or perfume. Every reservoir also is endued with small bits of such silk, whence it is conveyed into the sac, and there forms the pelotons in its cavities. Hence this animal has a natural (*castfolete*) perfuming-pot (or box), consisting of a capsula, perfume, and sponge to retain it; without which, the sac having neither valve nor sphincter, the odoriferous oil would run out as fast as it run in.” Thus *Mr. Morand*.

“Si Pandeſtario fides *Zebet* spuma significabit, & non inepte nostro Zibetho aptabitur metaphora; siquidem quum colligitur, irato animali, quasi spumans apparet.” Vide *Castell. Ionst. H. Quad.* p. 151.

S E C T.

S E C T. II.

It has the virtues of Musk; is called cordial, nervine, and anodyne; and commended in the epilepsy, hysteric fits, colic, frigidity, &c. But it is now little used. The dose is made to gr. iij. or iv.

“Zibethum, Civeta, Zibetta, calidum & humidum est, atque anodynum. “Ufus crebri, in dolore colico, (inungitur umbilico) in dolore ventris infantum, in strangulatu uteri applicatur vulvæ, vel cavernulæ umbilici.” *Schrod.* 804. “Viribus & dosi (*i. e.* ad gr. ij.) cum Moscho fere convenit, & eodem modo nocet.” *Nucl. Belg.* 314. “Hujus usus potius externus quam internus. Est antiepilepticum, antihystericum, nervinum, & anodynum.” *Herman. Cynof.* p. 41. partis 2.

1. It is of a fat rancid taste, like that of musty butter, but not sweet, then warm and penetrating, with the flavour of angelica root, which continues some minutes, but without acrimony; and of a fragrant smell: but in large quantities, and alone, it is fetid and disagreeable. “Quia sapor a nemine, quod sciam, est degustatus, ideo ex hoc nihil colligere possumus certi.” *Castel. Ionst. Quad.* 162. “Saporis subacris, odoris fragrantissimi.” *Herman. Cynof.* ii. p. 41. “Odoris est fragrantissimi & grati.” *Dale* 411. “Saporis sebacei & tandem acris, odoris fortis & ingrati, præcipue mulierculis hystericis, &c.” *Nucl. Belg.* 314. — 2. It is an animal substance: and as by the situation of the glands, that prepare and separate it, it appears to be of the same use to the animal that Musk is to the Musk animal, so probably their virtues are much the same, internè & externè. Its smell is reckoned equally hurtful with Musk to hysteric and vapourish people. (*Qu.* Whether by relaxing too much the nerves, like excessive pleasure?) However it seems to have been but little used inwardly, for some time at least, if it was not in confections and cordial drachms. See *Castellus Ionston.* for numerous authorities for its success in hysteric fits, barrenness, frigidity, outwardly applied. “Videtur partibus genitalibus dicatum pharmacum, de quo Castor Durantes ita cecinit,

“Zibethi Veneris crescunt solatia odore,
“Adjuvat hoc uterum ne præfocetur, & inde
“Est adeo vulvæ gratum, ut proclivis ad illud
“Quamvis admotum irrepit.

“*Ruellius* vero inquit, si cavernulæ umbilici admoveatur, tradunt conversum in alterutram partem uterum, in suam resilire sedem: aut si sursum versus impulsus opprimat, subdito eo devocari; tam amans hujus odoramenti vulva, ut ad id, undecunque admotum irrepit. Idem tradit *Matthiolus*, “*Renodæus*, *Amatus*, &c.” Thus *Castellus*, inter alia. But that *Civet* cures hysteric paroxysms by drawing the uterus up or down, as is above said, agrees as ill with the anatomy of the part as with the ætiology of the disease, asserts it who will. “Si vir ante concubitum, glandem Zibetto inungat, cum odore illius uterus delectetur, citius eum semen excipere plerique docent.” *Plater. Prax. Tom.* i. p. 489.

“℞ Zibethi gr. iij. Castor ʒj. Confer. Fl. Anthos. (vel) Syr. Matricar. q. f. “F. Electuarium (*dolus*) antihystericum.” *Herm. Cyn. partis* 2. p. 41. “Zibethum optimè solvitur cum saccharo, aut spiritu vini.” *Boecl. in Herm. Cyn. part.* 2. p. 44. who adds, “ingreditur balsama, & suffumigia, & unguenta.”

A P P E N -



A P P E N D I X.

ON THE

METHOD OF PRESCRIBING.

S E C T. I.

MY design here is briefly to direct how such as are sufficiently instructed in the Methodus medendi, or Indicationum doctrina, as well as in the Materia Medica, may prescribe the conjoining of such simples, in any case, as the intention of cure points out, in such forms as best suit the circumstances of the sick, and nature of the remedies, *ut tutò, citò, & jucundè sanentur*.

I own there is here no mystery in this; nay very little difficulty but what arises from the rules (generally laid down) needlessly multiplied, their inconsistencies in different authors, and the supercilious disregard which some shew to the commonly received notion or character of some of the formulæ.

For without consulting *Lubertus Eftbius*, *Caspar Baubinus*, *Marcus Banzerus*, *Petrus Morellus*, *Gerardus Blasius*, *Theodorus Schenckius*, *Wolfgangus Wedelius*, *Helfricus Juncken*, *Michael Etmullerus*, &c. or even the very learned *Hieronymi Davidis Gaubii M. & Chem. L.B.P. Libellum de methodo concinnandi formulas medicamentorum*. (Lug. Bat. 1739. in 8vo.) which may supply the place of all who have treated on this subject; I say, without consulting these authors, any honest man, of common sense, cannot but know that he neither ought needlessly to waste his patient's substance nor protract his cure, nor give trouble or pain, nor endanger his life; that if he order *impermiscibilia* to be mixed, pills to be formed of fluids, an electuary to be made of solids without any addition, or any way transgress in pharmacy, he prostitutes his character, and becomes the jest of the shops. Vide *Gaub.* p. 1 ad 51.

And, on the other hand, whoever consults authors will find, even amongst the most famous, such a difference in the prescriptions for the same formula, that it is not easy to determine of what consistence it ought to be; though on the consistence the difference of formulæ chiefly depends. I might instance in iniments, unguents, cerats, &c. while juleps and mixtures, tablets and troches,

are confounded even in standard pharmacopœiæ. *Vide* Julepum e Creta, & Tabellæ cardialgicæ, *Ph. Lond.* Tabellæ stibiata, Tab. de Rhabarbaro, *Ph. Paris.* p. 103. The old London dispensatories were in this more accurate, though the Committee seems to have looked on it as a trifle.

However *P. Gaubius* has been so full on this subject, that it is worth your while to peruse him carefully, and to note down what you did not know before of any consequence. To him I might refer you altogether, were there not some things, relative especially to weights and measures, to doses of simples and compounds, &c. not so fully handled by him, and very useful for you to know. I begin with weights.

S E C T. II.

1. Pondera, or weights, go under the denomination of grana, scrupuli, drachmæ, uncia, & libra; the value of which every dispensatory explains, supposing the value of a grain known: which being arbitrary, it depends on the standard kept by the magistrates, and fixed by the laws of every country. The medicinal grain in Britain is the same with that used by goldsmiths in weighing gold and silver; five of which make six French grains: so though the French gr. consists of gr. xxiv. and gr. of gr. lxxii. yet their gr. and gr. are the same with our gr. and gr. . Of our grains 480 make an ounce, and twelve ounces the medicinal pound. But,

2. The common English weights, or avoirdupoise, used in commerce, differ from the medical: for the avoirdupoise ounce contains only 438 grains, and therefore wants of the medical or troy ounce 42 grains: while the avoirdupoise pound, consisting of 16 avoirdupoise ounces, and the medical of 12 troy ounces only, is lighter than the avoirdupoise pound by gr. xlviij. as the avoirdupoise pound wants of the troy, or French and Dutch, pound of gr. xxxvj. gr. gr. xij. The medical pound in France was formerly gr. xxxij. ; that is the same with ours. *Vide Lem. Pharm.* p. 41. But now, according to the *Cod. Medicam. Edit.* 1748. it consists of gr. xxxvj.

3. Although quantities of all sorts of substances are most accurately determined by weights, yet for conveniency sometimes liquids are ordered by drops or by measure. Thus some strong oils, essences, tinctures, and volatile spirits, are prescribed by drops. But drops varying, according to the specific gravity and consistence of the liquid, as well as the surface whence they fall, so that a drop from a large vessel may be as weighty as two of the same liquid from a small one, there is here less accuracy: but the smallest drops being equal to gr. ss. and the largest seldom exceeding gr. j. it is easy to adjust the dose even thus with sufficient safety.

4. The measures used in our shops are the cochleare, containing syrapi ss. vel aquæ stillat ssij. nearly; and the congius, containing ssvij. that is of avoirdupoise ssvj. gr. gr. iv. nearly; which deserves to be considered both in prescribing and dispensing more than it commonly is at present. But

In authors you will meet with four sorts of cochleare, viz. cochleare maximum= ssiv. ; cochleare magnum= ssij. (aliis ssss.); cochleare parvum= ssj. (which I take to be the cochleare pulverum, viz. valerianæ sylvestris); and cochleare minimum,

minimum, equalling ʒß: Also a cyathus, containing ʒiß; and a sextarius measure, which is the sixth part of a congius, here equal to about ʒxvj; tho' the congius and sextarius antiquorum were larger than ours.

“ Vini mensuras adhibemus; & eam vocamus libram quæ lingua vernacula appellatur a wine pint. Hanc libram hac ratione dividimus. Libra habet ʒxvj; uncia ʒviiij; congius habet lib. viij. Cochleare denotat mensuram ʒß.” *Ph. Lond.* p. 2. But their dry pound contains ʒxij. &c. as formerly. “ Pondera, rejectis vulgaribus mensuris, manipulis nempe, pugillis, pintis, &c. utpote nimium variabilibus, singula ad trutinam revocata sunt. Gratum quod æquat pondus grani hordei modice crassi. Scrupulus, qui pendet grana viginti quatuor. Drachma, quæ continet scrupulos tres: uncia, quæ est drachmarum octo: libra, quæ complectitur uncias sexdecim.” *Cod. Medicam Pref.* Judge which is preferable.

5. Quantities are sometimes defined by bulk, and at other times by number; which being very variable, or no ways fixed and certain, are justly laid aside almost every where. Thus pugillus major is reckoned equal to ʒj; pugillus minor to ʒß; manipulus to ʒß; and fasciculus is of no certain weight, being sometimes a handful, and sometimes an armful. As for Lupinus, nux pontica, nux myristica, and the like, often used to direct how much of an electuary is to be taken, when there is no danger in the quantity, they need no explication, though authors differ about them.

Fruits, bulbs, leaves, eggs, and insects, are sometimes directed by number; but this is always an uncertain way, and sometimes very unsafe. Vide Cantharides. So that it is not to be recommended.

6. For the weights and measures of the ancients; *Stephani Blancardi Lexicon medicum renovatum*, &c. *Lugd. Bat.* 1717. in 8°. will sufficiently explain them, as they occur in your studies. And when you have time, you may consult *Georgius Agricola*, *Conradus Gesnerus*, *Dominicus Massariæ*, *Joannes Rhodius*, *Edwardus Bernardus*, (*De mensuris & ponderibus antiquis*, *Oxonix* 1688. in 8vo.) *Dr. Arbuthnot*, and twenty others on this subject, and see if you can exhaust it. So much for weights and measures.

S E C T. III.

I have given the dose of the simples; and am now to enquire how the doses of compounds are to be found; and how the doses of simples, as well as of compounds, are to be proportioned to the circumstances of particular patients, chiefly with regard to their age and constitution.

1. To find the dose of any compound, when the quantity of each ingredient is specified: what quantity of any of the ingredients is in any given quantity of such a compound, what quantity of it contains a given quantity of any of the ingredients, and the like, are too puerile problems to be insisted on here. But how to investigate the dose of the compound, when either the weight of all the ingredients is not mentioned; or any of them not taken in substance, but in tincture or decoction, is of more consequence. *Ex. gr.*

Queritur 1. Dosis pil. coccix, R Aloes, colocynthidis, scammonii aa ʒj, tartari vitriolati ʒij, olei caryophyllorum ʒj, syrupi de spina cervina q. s. ut f.

massa pilularis. Here are pulverum ℥ij ; which, as will appear afterward, require an equal quantity of syrup to reduce them into a mass of pills: but the salt and oil, rather diluting than thickening the syrup, ℥ij . ʒv . of it will suffice; and the mass, well wrought, will weigh ℥vj . So the full dose aloës being ʒj . colocynthis gr. xv. & scammonii ʒj . erint in massæ ℥vj . doses lxiv. (viz. doses aloes 8. colocynthis 32. & scammonii 24.): and massæ P. ℥vj . = ℥xlviij . = ℥cxliv . divided by the lxiv doses, gives ℥iijss for a great dose of this pill, and consequently ʒß a good common dose. N. There are in pilularum coccia ʒj aloes, colocynthis, & scammonii āā . ʒß . and not of each gr. xvij. according to Lem. Pharm. p. 300. nor gr. xij. as it is in Shipton's Tab. posog. p. 71. Neither are there in pil. de colocynthide cum aloe Ph. Lond. ʒj , aloes & scammonii gr. xvj, & colocynthis gr. viij, as Dr. Pemberton calculates in his table annexed to the Dispensatory. It is true, the thickness of the syrup, and heat or coldness of the season, &c. may alter a little the proportions: but that so much syrup was necessary was found by trial.

Quæritur 2. Dosis extracti Rudii (Ph. Edinb.) which is thus made: R Radicis hellebori nigri, & colocynthis āā . ℥ij , contusis affunde aquæ fontanæ lbiv. Coque ad medias, & colatura per pannum laneum trajecta exhalet ad spissitudinem mellis, adjiciendo in pulverem trit. aloës socotrinæ ℥ij , scammonii ℥j . Massæ ab igne remotæ immisce tartari vitriolati ʒij , olei caryophyllorum ʒj .—Now, 1. There being here pulverum ℥ij , they will require the same quantity of the extract of the consistence of honey, with the salt and oil, to bring the mass to a due consistence. In this quantity are 88 doses (viz. hellebori nigri 16, colocynthis 32, aloes 16, & scammonii 24.) and massa ℥vj , equal to 2880 grains, divided by 88 doses gives $32\frac{5}{11}$ grains, which is a large dose of this extract: for ʒj contains aloes ʒj , scammonii ʒß , extracti liquidi hellebori nigri, ac colocynthis āā . $12\frac{1}{2}$ grains nearly: which $12\frac{1}{2}$ grains is the extract of ʒj . of each of these two ingredients nearly; if there is no error in the above calculation. Neither Lemery nor Shipton have calculated how much of each of the ingredients is contained in a drachm of this extract. Was Eustachius Rudius (Utinensis) who wrote much, about the end of the sixteenth century, the author of this composition?

2. This pill has long been much used, and very famous in England; tho' several times altered. At first it was a resinous extract of colocynth, agaric, scammony, helleb. nig. turbith, and diarrhodon abbatis (a confused hotch-potch of above thirty ingredients) drawn with spirit of wine, (vide Culp. Ph. p. 142). Afterward diarrhodon was exchanged for some cinnamon, cloves, and mace, and the aloe and scammony were taken in substance, (vide Ph. Lond. edit. 1682. p. 217). Yet, it seems, the shops did not much regard the College; for we find it thus in Shipton: "R Coloc. ʒvj , agar. scammon. helieb. nigri, turpet. āā ℥ß , aloes ℥j , cinnam. macis, caryoph. āā ʒij . sp. V. opt. " q. s. ut extrahatur tinctura, quæ exhaletur in massam, S. A." Which Quincy also follows, Pharm. p. 420. However the Lond. Pharm. edit. 1721. adheres to the receipt as in the former edition. But the Committee in 1746, after much commendation, dismissed extractum rudii, and substituted an extractum catharticum in its place, thus, "R Aloes succotrinæ ℥iß , medullæ " colocynth. ʒvj , scammonii, & seminum cardamomi minoris decorticatorum, " singulorum ℥ß , spiritus vinosi tenuioris M. lbj, colocynthidi minutim in-

“ cise, seminibusque contusis affuso spiritu vinoso, leni calore per quatrimum
 “ macera, tincturæ expressæ adde aloen & scammonium separatim in pulverem
 “ redacta; his solutis, spiritum abstrahe, & massam redige in pilularem crassi-
 “ tudinem.” *Pb. Lond. N. B. Pembert. Dispensf. p. 168.* So here are pulve-
 rum 3xvj, which will require at most but tinctura 3xij, to bring to the con-
 sistence, and make the mass weigh 3xxviiij, containing sixty moderate doses.
Ergo gr. xxviiij dosis est extracti cathartici: of which 3j will contain aloes
gr. xxv, scammonii gr. viij, tincturamque gr. xiiij colocynthidis. This extrac-
 tum catharticum is omitted in the “*Table for computing the doses of compound*
purgatives, &c.” annexed to *Dr. Pemberton’s Dispensatory.*

While you have an opportunity in shops to see compound medicines pre-
 pared, you ought carefully to observe what proportion the excipient bears to
 the species, or other ingredients, by weighing them after they are made up.
 For thus you acquire the greatest certainty as to their doses, and will be able
 to judge whether the common posologic tables are to be depended on. Vide
Gaub. p. 92. 7.

S E C T. IV.

But the greatest difficulty remains, viz. how to increase or diminish the
 common dose according as the age and constitution of particular persons may
 require it. For that a child cannot safely take as much as a man, nor a weak
 person as much as a strong, is evident. Several attempts have been made to
 solve this problem, but with what success we shall presently see.

1. *Dr. William Cockburn, M. D.* in 1705 favoured us with a solution of a
 problem he had given into the *R. S.* the year preceding; you have it *Phil.*
Transf. No. 303. p. 2119. The title is, “*Gul. Cockburn, M. D. solutio*
 “*problematis de purgantium & emeticorum medicamentorum dosibus deter-*
 “*minandis, in quacunq; hominis ætate, temperamento, temperamenti varie-*
 “*tate, per universum terrarum orbem, ab ipso mense Martio proxime elapso,*
 “*in actis philosophicis proposito.*” Here he assumes, 1. That such medicines
 do not operate untill they are mixed with the blood, “*ni nauseam moveant.*”
 2. That their common effect is “*temperamenti liquorum gyantium alteratio.*”
 Hence, 3. he infers that the doses must be as the quantity of the blood, its
 crasis being the same: and 4. That the quantity of the blood is as the weight
 of the body; and consequently the doses must be “*cæteris paribus, ut cor-*
 “*poris pondus.* Exempli causa, *Pil. rudii gr. xxx unica plerumque dosi ho-*
 “*mini exhibentur, & hominum pondus commune est 160 librarum, & infan-*
 “*tum recens natorum, librarum 12, quapropter, ut sunt 160 : 12 :: 30 : 2*
 “*dosin pro infante.*” 5. That the difference of constitutions is owing to the
 different degrees of the blood’s cohesion, or fluidity; and therefore the doses
 must be proportional to the blood’s tenacity, the velocity being the same.
 6. That the velocity being always, cæteris paribus, as the blood’s fluidity, the
 quantity of the blood being the same, the dose must be as the blood’s tenacity
 multiplied by its velocity, or proportional to the squares of its tenacity. Whence
 he deduces this theorem: “*Dosium quantitas, hominibus diversæ quantitatis*
 “*sanguinis exhibenda, qui simul diversis pollet cohærentiæ gradibus, est in*
 “*ratione composita, ex ratione ponderis hominum, & duplicata graduum co-*
 “*hærentiæ.*”

“ hærentiæ.” And he says the same will hold, though medicines are supposed to act only by stimulating the stomach and intestines. But although all his data were granted, which however they cannot be, I believe his theorem would be of little use. Wherefore, to facilitate the practice,

In 1708 he gave the Society another paper, called “ The practice of purging and vomiting medicines, according to *Dr. Cockburn’s* solution of his problem, with tables shewing their doses in particular ages and constitutions.” You have it in *Phil. Transf.* No. 314. p. 46. wherein, after resuming what he thinks manifest from his solution, he adds: “ The ages, wherein these different doses are taken, I find to be four: when a man is about sixteen or twenty years, and weighs about twelve stone, he then takes the common dose; (to fifty is in the solutio); one of nine years takes three fourths of it; one of six takes half; and one of three years takes one fourth. Moreover the notable healthy constitutions are but three, (*Æcon. Anim.* p. 51. *Bibl. Anat.* Tom. II. p. 112. 4.) let them be as two, three, four; that of the most fluid blood as the first number, and so on. In that case, the dose for any person will be found by multiplying the common dose for his age into the square of his constitution, and dividing by the square of the middle constitution.” And by this rule he calculates his tables; how justly I leave you to examine, since his foundation is merely hypothetical, and faulty at first sight: it is therefore of no use. For if we grant his postulata, it is very easy without them to find the doses. *Ex. gr.* If $3ij$ be a common dose for an. 16, then $3j$ will be a dose for an. 6 middle constitution; $3ß$ for weakest constitution; and $3iß$ for the strongest constitution of the first age: which comes nearer the truth than his grains $xxvj. \frac{2}{3}$ of a grain for constitution two, and $3iß$ $16\frac{2}{3}$ grains for constitution four. As in his tables: which are seven in number, but easily contracted into one.

In the *Medical Essays*, Vol. IV. Art. 5. is “ An Essay towards ascertaining the doses of vomiting and purging medicines, by *Dr. Charles Balguy*, of *Peterborough*, Physician.” He says *Dr. Cockburn* attempted this some time since; “ but, as he went upon a wrong principle, he must needs be mistaken in his consequences.” But, so far as I can see, he has neither gone on better principles, nor shewn more knowledge of medicines. . . . Which probably occasioned the compliment payed them by *Dr. T. R.* (in his cure for . . . tar-water, printed 1744.) “ Hence, my Lord, says he, it appears, that your reasoning about this chimerical doctrine not only seems but is chimerical. It is of the same kind as that employed by some wrong-headed doctors among the ancients;” (Alkindus is mentioned, a very modern ancient, if of the twelfth century) “ and revived by others, no less so, among the moderns, (*Phil. Transf.* No. 293. and *Med. Eff.* Vol. IV.) to prove the doses of purging medicines ought to be determined by mathematical rules, sometimes as the size into the constitution, and at others as the size into the square of the constitution.”

2. In “ *Theodori Balthasaris, M. D. De dosibus medicamentorum diatribe, qua illæ juxta medicinæ practicæ pariter ac mathesios principia expenduntur,*” (Erlangæ 1719. in 8vo.) the cap. 6. is “ *Quomodo doses respectu ætatum variandæ & his accomodandæ sint.*” Here he observes, 1. That doses ought to be proportioned to the vires corporis. 2. That the vires corporis increase

from the beginning of life till one arrives at full vigour, continue the same for some time, and then gradually decrease. 3. That this *virium augmentum* is not proportional to the age arithmetically: “sed vires & robur corporis, quo propius ortui, eo velocius crescunt, & post consistentem ætatem, paulatim decrescunt, tardius primo, deinceps velocius;” and consequently the doses must keep the same progression. 4. That a man arrives at full strength and vigour at forty, continues much the same to fifty, after which *jactura virium* evidens magis evadit. And 5. That if a curve line could be found, whereof the applicatæ increase in length, at first faster, then more slowly, and when come to the longest, or post maximam applicatam, again by little and little decrease; while the axis abscissæ keep the progression of natural numbers (or are equal) such applicatæ would conveniently express the vires corporis, and consequently the doses medicamentorum, for the different ages signified by the abscissæ. Then he proceeds to investigate his curve, and, when found, calls it an *ostroide*, or *linea dosium*; whence he deduces a general theorem for finding the proper dose of any medicine for every age, the full dose being given; by it calculates long tables; and contrives, describes and figures a balance, by which the doses may be not only easily found, but also most expeditiously and accurately dispensed, or weighed out.

In these tables, which fill eight pages, you have the doses of medicines, whereof the full dose is gr. x. gr. xv. ʒj. ʒss. ʒj. ʒj. or ʒij. for every year of one's age, from 1 to 100. (after which few take drugs); and that not only in grains, but even to the 1000th part of a grain. If nature did not admit of a greater latitude than our author does, there would be few physicians. However, the tables may easily be brought into very small bounds. Here *Balthasar* has the advantage of *Cockburn*, in that none of his postulata can be denied, if we add only to the fifth after decrease *ut vires corporis*. For here only lies the defect. The ratio of the increase and decrease of the vires corporis ought first to have been investigated; it being somewhat preposterous to determine the vires by a variable curve, which ought to have been, were there occasion for it, proportioned to the vires, or the length of its applicates determined by them. This our author seems to have been aware of, when he says: “Licet vero demonstratione mathematica evincere nequeam vires præcisè hac, non alia ratione crescere & decrescere sufficit tamen eam quam proximè respondere observationi & experientiæ.” p. 154. And certainly by his method the ratio dosium comes nearer to the ratio virium than by D. Cockburn's, in which the dose for one of six years is double, and for one of nine treble, to that of one of three; whose numbers, both of age and constitution, seem to have been pitched on merely for the conveniency of easy calculation. Is one as strong at sixteen as at twenty?

By comparing the tables of these two learned gentlemen, it appears also, 1. That *Dr. C.* gives the doses for four years of one's life; *Dr. B.* for every year to 100. And 2. That they differ considerably in the dose proper for the same age. Thus of any medicine, “cujus dosis communis est ʒij.” to one of three years *Dr. C.* gives gr. xxx, *Dr. B.* gr. xxxj; to one of six *Dr. C.* gives ʒj, *Dr. B.* gr. liv; to one of nine *Dr. C.* gives ʒss, *Dr. B.* ʒj. gr. xij; to one of sixteen years *Dr. C.* gives ʒij, *Dr. B.* ʒss. gr. viij, which is but eight grains more than *Dr. C.* orders for one nine years old. Surely nature allows of a
very

very great latitude in dosing, if both these tables are founded on experience, as both the doctors pretend: to which however *Dr. Balthasar* has evidently the better claim. But,

3. Let us hear *Professor Gaubius*. “In dosi dua spectanda veniunt, moles nimirum atque numerus. Molem determinant variæ tam ægri quam medicamenti adhibendi conditiones. . . Hinc attendendum (α) ad morbi naturam . . . (β) ad vires vitæ . . . (γ) ætatis deinde ratio habenda. Quocirca sequentes fere obtinent generales regulæ, quoad remedia interna. (vide *Junckeri Consp. Form.* p. 4.) Pone dosin efficacem esse pro homine consistentis ætatis

Erit pro ann. xiv. ad xxi. . . .	$\frac{2}{3}$	vel 3j.	} secundum Balthasar.
vii. ad xiv. . . .	$\frac{1}{2}$	vel 3ß.	
iv. ad vii. . . .	$\frac{1}{3}$	vel 3j.	
iv.	$\frac{1}{4}$	vel gr. xv.	
iii.	$\frac{1}{6}$	vel 3ß.	
ii.	$\frac{1}{8}$	vel gr. viij.	
i.	$\frac{1}{12}$	vel gr. v.	

“Senes bis pueri, ut viribus & victu, sic & medicamentis: unde in his sexagenarium cum Juvene tertii septennii; septuagenarium cum adolescente secundum; octuagenarium cum puero primi, & sic porro comparare forsân licet. Neque tamen adeo hæc constanter obtinent, quin multas ferant exceptiones; prout facile patet diversos ejusdem ætatis homines, ratione virium, inter se conferenti. Quare ex ætate sola, vix recte calculum posueris.” Vide *G. De methodo concinandi formulas*, p. 24, &c. where is shewn what regard is to be had to the moles corporis, temperies, sexus, dispositio, idiosyncrasia, consuetudo, vitæ genus, nationes, anni tempus; remedii efficacia, pretium, levitas, injucunditas, formula, & usus.

But it does not appear, either from *Juncker* (*Con. sp. form. halsæ Magdeburgicæ* 1730. in 4to, p. 112.) nor from *Gaubius*, on what principles these proportions are founded. If on experience only, they differ much from Balthasar in some ages, agreeing in others, as in p. 567. Besides, he makes the dose ab an. 14. ad 21. the same: also ab an. 7. ad 14. and ab an. 4. ad 7. So that the dose ab an. 14. is $\frac{1}{2}$, but an. 15. $\frac{2}{3}$, and an. 21. no more, which is not very accurate. Vide his three following articles or regulæ: which would have been more distinct, had he begun where he ends thus: “Erit pro an. 1. . . . $\frac{1}{12}$, vel a nativitate ad an. 1. & sic de cæteris.” I need not observe to you in what particulars *Gaubius* differs from *Cockburn*: they scarcely agree in any thing.

S E C T. V.

Let us now see if this problem is capable of a sufficiently (at least of a more) accurate solution; taking experience for our guide. In order to which let it be observed:

1. That we commonly increase in size and in strength from our nativity to the 29th year of our age, continue much the same to 50, and begin and continue to decrease to 70, 77, or 84, the common periods of old men. —

2. That

2. That neither our increase nor decrease is proportional to the number of our years: nor can either be expressed by the applicates of any imaginable curve. For—3. Although our increase is (*cæteris paribus*) greater the first year, in proportion to our bulk, than the second; the first month than the second; yet neither is this increase reciprocally proportional to our age; nor are we always from our birth to our full vigour continually increasing: both strength and bulk are now and then at a stand for some time, and then again increase faster than they did before, and so on. And thus we come to full vigour per saltus, or steps, as it were; our increase being better represented by a pair of stairs, or a ladder, than by a curve. Hence it is that physicians, having observed certain periods of time wherein we undergo commonly remarkable changes either to the better or the worse, have called them *clymacteras*, from κλίμαξ, scala, a ladder, stile, or an ascending by steps or degrees. And no period having been so much remarked as that of seven years, every seventh year has been called a *climacter*, *climactera*, or *climacteric year*. In *Vander Linden's Hippocrates*, Vol. I. p. 314. there is inserted *Hippocratis de ætate fragmentum ex Philanis Indæi de Opificio Mundi*, p. 24. which runs thus in Latin: “Hippocrates medicus ait septem esse ætates, infantes, pueri, adolescentis, juvenis, viri, senioris, senis. Has autem mensurari hebdomadis, quanquam non ultimis. Ait autem, in hominis natura sunt septem tempora quas ætates vocant, infans, puer, adolescens, juvenis, vir, senior, senex. Infans est usque ad septem annos, dentium amissionem. Puer vero usque ad genituræ ortum, ad bis septem. Adolescens usque ad barbæ lanuginem, ad ter septem. Juvenis usque ad auctiorem totius corporis, ad quater septem. Vir usque ad undequingagesimum, ad septies septem. Senior usque ad quinquaginta sex, ad septies octo. Deinceps vero senex est.” Thus *Hipp.* or *Philo.* Besides, in women, “ad bis septem annos erumpunt menses vulgò, ad septies septem fluere desinunt vulgò.” And in children dentition generally begins in seven months. *Hoffman* says, “Lumbrici circa septimum annum uberius sese exerunt. . . Vigesimo primo & vigesimo octavo accedente, foeminæ fiunt multum salaces; & amatoriis febribus corripiuntur.” Vide *Dissertatio de Annorum Climactericorum rationale & medica explicatione*. Lugd. Bat. 1713. in 8vo, where you have a great deal more on this subject: as you have also in *D. And. Elias Buchneri Disquisitio medica-physico de veris effectibus annorum climactericorum in corpus humanum, illorumque causis*, in the Appendix to the Vol. VI. *Act. Physico-medica*, &c. Norimb. 1742. a p. 149—158.

Now, as it is evident that a child increases in strength faster before dentition than during the time of it; so also faster after it is over; faster after casting the teeth than before; faster after puberty than before, &c. it must follow “vires quo propius ortui, eo velocius crescere,” is not strictly true. Though we cannot strictly determine in what proportion they increase at such periods (to which perhaps their increase of bulk or weight, if we knew it, might considerably assist us); yet it seems reasonable to have some regard to them in adjusting the doses for different ages; but so far only as they are countenanced by experience; which of itself would be sufficient, if practical authors agreed. But we seldom find any one author keep always the same proportion of the different medicines prescribed by him for the same age. Thus even the great *Boerhaave*, for an infant retaining too long the meconium, prescribes in one

receipt $\frac{1}{12}$, in another $\frac{1}{12}$, in a third $\frac{1}{12}$, in a fourth $\frac{1}{7}$ part of the common dose, of mild cathartics; *Lib. de M. M.* As *Wedelius* does sometimes $\frac{1}{12}$, at other times $\frac{1}{10}$, yea $\frac{1}{8}$, even of a strong cathartic. “Notandum, says he, “infantes facillimè ferre purgantia, & ipsa etiam correctiora emetica. Dedi “sæpius infantibus duorum vel trium saltem dierum Gialapium ad gr. ij, iij, “& iv. felicissimo cum successu; hoc modo & somnum concilians inquietis, “& humores leniter educens; quod ipsum a variis symptomatibus eos pre- “servat. Et, quod majus est, certissimum est infantes hæc ipsa purgantia, “respective & proportionaliter, longe commodius & in majori dosi, quam “adultos ferre.” Vide *Opiolog.* p. 38. Now, it being safer to give too little than to give too much,

(a) We may fix on the fifteenth part of the common dose, as the proper dose for an infant from its nativity until it be seven weeks old; and from seven to fourteen weeks $\frac{1}{12}$ dosis communis; and from fourteen to twenty-one weeks $\frac{1}{10}$. (β) Since for one of a year old *Balthasar's* dose is about $\frac{1}{12}$, *Gaubius's* $\frac{1}{12}$, which is exceeded by *Boerhaave* and *Wedelius*: the dose for a child from twenty-one to twenty-eight weeks, or to seven months, may be $\frac{1}{12}$ dosis communis; and thence to fourteen months $\frac{1}{10}$. Though *Harris* (*De Morbis Infantum*) gives sometimes $\frac{1}{8}$, sometimes $\frac{1}{6}$ and more, to a child unius anni, that is, I suppose, from one to two years. (γ) For a two-year-old child *Balthasar* giving $\frac{1}{6}$, and *Gaubius* $\frac{1}{4}$, the dose from fourteen to twenty-eight months may be $\frac{1}{8}$, and thence to forty-two months, or three years and a half, may be $\frac{1}{6}$ dosis communis, which is *Gaubius's* dose for one of three years; though *Balthasar* gives $\frac{1}{4}$. And (δ) thus, by comparing authors, you will find the proper dose for one from three and a half to seven to be $\frac{1}{4}$, to fourteen years $\frac{1}{2}$, to twenty-one years $\frac{3}{4}$, from that time to fifty-six years the full common dose, from thence to seventy years $\frac{9}{10}$, to eighty-four $\frac{8}{10}$, to ninety-one $\frac{7}{10}$, to ninety-eight $\frac{6}{10}$, to 105 $\frac{5}{10}$, or $\frac{1}{2}$. But,

2. As there are several circumstances of particular persons, arising from custom, diet, disease, or the like, which may make the variation of the dose for their age necessary; so they may be comprehended under the general name constitution, or *idiosyncrasia*, by which I understand the disposition which any person has to be more easily or more difficultly moved by medicines than commonly persons have of the same age: which may be generally discovered by his way of living, as to diet, exercise, &c. the effect of medicines formerly taken; the structure of his body; nature of his disease; and the like. *Dr. Balthasar* employs near twenty pages in demonstrating a self-evident truth, viz. that if the squeamishness of a person in the dysentery be such as to double the efficacy of an emetic, half a dose will operate as well as otherwise a whole dose would have done. But at the same time it must be acknowledged, that constitutions are so various, that no general rule can be given for thereby regulating doses, otherwise than by reducing the constitutions into classes, as *Dr. C.* has done; or, according to the proportion which the weakest constitution bears to the strongest, proportioning their doses; which is much the same.

Dr. Cockburn supposes the constitutions to be as two, three, and four: but (were it not for his squares) one, two, three, would do as well; which, I think, may safely be admitted. For in authors the full dose of any medicine is not a determined quantity, or certain number of grains for instance; but from such

a quantity to such a quantity; as from $\mathfrak{D}\beta$ to $\mathfrak{z}\beta$; from $\mathfrak{z}\mathfrak{j}$ to $\mathfrak{z}\mathfrak{i}\mathfrak{i}\mathfrak{j}$, &c. thereby denoting the largest as well as smallest full dose: the mean betwixt them being the common one; while the largest is most commonly triple the smallest; or at least there are as many above as below this proportion. See *S. Pauli Doses Medicamentorum*, annexed to his *Quad. Botanicum*; and *Catharticorum Simpl. Doses*, in the end of the *Pharm. Bateana*, edit. 1691. In which last the Dosis Elaterii is gr. j, ij, iij; Scammonii gr. vj, xij, $\mathfrak{D}\mathfrak{j}$. (for xvij gr.) Gratiolæ & Sem. Ebuli $\mathfrak{D}\mathfrak{j}$, $\mathfrak{D}\mathfrak{i}\mathfrak{j}$, $\mathfrak{D}\mathfrak{i}\mathfrak{i}\mathfrak{j}$; Gambogiæ $\mathfrak{D}\beta$, $\mathfrak{D}\mathfrak{j}$, $\mathfrak{z}\beta$; Lapid. Lazuli & Armeni $\mathfrak{z}\beta$, $\mathfrak{z}\mathfrak{j}$, $\mathfrak{z}\mathfrak{i}\beta$; Hermodactyli $\mathfrak{D}\mathfrak{i}\mathfrak{j}$, $\mathfrak{D}\mathfrak{i}\mathfrak{v}$, $\mathfrak{z}\mathfrak{i}\mathfrak{j}$; Mannæ ac Tamarindi $\mathfrak{z}\mathfrak{j}$, $\mathfrak{z}\mathfrak{i}\mathfrak{j}$, $\mathfrak{z}\mathfrak{i}\mathfrak{i}\mathfrak{j}$. And if these are rightly proportioned, the rest should be so too. Thus the dose of Aloes should be $\mathfrak{z}\beta$, $\mathfrak{z}\mathfrak{j}$, $\mathfrak{z}\mathfrak{i}\beta$, (not $\mathfrak{D}\mathfrak{j}$, $\mathfrak{z}\mathfrak{j}$, $\mathfrak{z}\mathfrak{i}\mathfrak{j}$); of Colocynth gr. vj, xij, xvij, (not gr. vj, $\mathfrak{D}\beta$, $\mathfrak{D}\mathfrak{j}$); of Jalap $\mathfrak{z}\beta$, $\mathfrak{z}\mathfrak{j}$, $\mathfrak{z}\mathfrak{i}\beta$, (rather gr. xv, $\mathfrak{z}\beta$, gr. xlv, not $\mathfrak{D}\mathfrak{j}$, $\mathfrak{z}\mathfrak{j}$, $\mathfrak{D}\mathfrak{i}\mathfrak{v}$, as in our author); and so of others. For I do not see why what is a just proportion in one cathartic ought not to be so in all. And therefore the half of a common dose is a sufficient dose for the weakest constitution, and two-thirds for the strongest.

It must however be owned, that authors, in this respect, are often as little consistent with themselves as with one another. *Ex. gr.* Dosis Aloes est à $\mathfrak{z}\beta$. ad $\mathfrak{z}\mathfrak{i}\mathfrak{i}\mathfrak{j}$. (*i. e.* à 1 to 6.) *Sennerto*; à $\mathfrak{z}\mathfrak{i}\beta$ ad $\mathfrak{z}\mathfrak{i}\mathfrak{i}\mathfrak{j}$, *Fernelio*; à $\mathfrak{z}\mathfrak{j}$ ad $\mathfrak{z}\mathfrak{i}\mathfrak{i}\beta$, *Morello*; à $\mathfrak{z}\mathfrak{j}$. ad $\mathfrak{z}\mathfrak{i}\mathfrak{j}$, *Horstio*; à $\mathfrak{z}\mathfrak{j}$ ad $\mathfrak{z}\mathfrak{i}\beta$, *Duncan*, &c. Dosis Scammonii est à gr. v ad gr. x vel xv, (*i. e.* ab 1 ad 2 vel 3), *Sennerto*; à gr. vj ad x, *Fernelio*; à gr. vj ad xv vel $\mathfrak{D}\mathfrak{j}$, *Morello*; à gr. vj ad xij, *Duncan*. . . Colocynthidis à gr. vij ad xv, *Horstio*; à $\mathfrak{D}\mathfrak{j}$ ad $\mathfrak{z}\beta$, *Fernelio*, &c. Rhabarbari dosis est a $\mathfrak{z}\mathfrak{j}$ ad $\mathfrak{z}\mathfrak{i}\mathfrak{j}$, *Sennerto*. And so of others. As if simples might be dosed at random, we find the smallest full dose to the greatest as 1 : 2. 1 : 3. 1 : 4. 1 : to 6, &c. This seems to be taking a greater latitude than nature allows of.

Dosium ratio ætatum respectu, *ex. gr.* Rhabarbari, quod datur à $\mathfrak{z}\mathfrak{j}$ ad $\mathfrak{z}\mathfrak{i}\mathfrak{j}$ vulgè; ab ortu vero ad hebdom. 7, &c. ut sequitur:

Æt. ab ortu ad	Dosis propriæ	Rhabarbari	Æt. ab an. vii. ad	Dosis propriæ	Rhabarbari
Hebdom. 7	Com. pars $\frac{1}{15}$	Gr. iv. advij.	Annum 14	Com. pars $\frac{1}{2}$	Gr. xxx. $\mathfrak{z}\mathfrak{j}$.
Hebdom. 14	Com. . . $\frac{1}{13}$	Gr. iv. β . . ix.	Annum 21	Com. . . $\frac{2}{3}$	$\mathfrak{D}\mathfrak{i}\mathfrak{j}$. . . $\mathfrak{D}\mathfrak{i}\mathfrak{v}$.
Hebdom. 21	Com. . . $\frac{1}{11}$	Gr. iv. $\frac{2}{3}$. . ix. $\frac{1}{2}$.	Annum 28	Com. . . $\frac{3}{4}$	Gr. xlv. xc.
Hebdom. 28	Com. . . $\frac{1}{12}$	Com. v. . x.	Annum 56	Com. dosis	$\mathfrak{z}\mathfrak{j}$ $\mathfrak{z}\mathfrak{i}\mathfrak{j}$.
Mensem 14	Com. . . $\frac{1}{10}$	Gr. vi. . xii.	Annum 70	Com. . . $\frac{9}{10}$	Gr. liv. cviii.
Mensem 28	Com. . . $\frac{1}{8}$	Gr. vii. β . xv.	Annum 84	Com. . . $\frac{9}{10}$	Gr. 48. . 96.
Mensem 42	Com. . . $\frac{1}{6}$	Gr. x. . $\mathfrak{D}\mathfrak{j}$.	Annum 91	Com. . . $\frac{7}{10}$	Gr. 42. . 84.
Annum 7	Com. . . $\frac{1}{4}$	Gr. xv. $\mathfrak{z}\beta$.	Annum 98	Com. . . $\frac{6}{10}$	Gr. 36. . 72.

But to conclude this article, when there happens to be danger in the defect, as well as in the excess, and you cannot determine what quantity will prove a sufficient dose; divide the dose for the patient's age into three or four parts, and give them at proper intervals, till they answer your intention: *Et hæc sit regula generalis*. What is said of doses is not to be restricted to cathartics and emetics; but concerns medicines in general, even when the dose is determined more by the bulk of the substance than by its efficacy; yea and when injected per anum as well as when taken by the mouth: *Ex. gr.* Pul. stanni dosis

communis est ʒij , and consequently ʒʒ for one of seven years old. Clysteris dosis communis est ʒhj : ergo ʒij are enough for a child of the former age, though of a vigorous constitution. *N. B.* 1. That the dose of the simples, given in the above lectures, is the full dose for one of the strongest constitution. *N. B.* 2. That although I have made the constitutions to be as one, two, three, yet, considering the allowable latitude in such cases, there can be little danger in making the dose for the strongest constitution only double that for the weakest; or that for the weakest to be only half the dose of that for the strongest constitution. Thus if jalapæ ʒʒ purge the one, the other may safely take gr. xv. So the constitutions will be as *Dr. Cockburn* makes them, as 2, 3, 4. Thus much for doses.—Proceed we now to consider formulas themselves.

S E C T: VI.

The sum of what I have to say of formulas in general comes to this: In prescribing there ought to be no inconsistency in the directions, nor incongruity among the ingredients; no occasion of mistake given to the dispenser, nor unnecessary trouble; and nothing omitted that can any way contribute to the rendering the prescription as safe, efficacious, and agreeable to the patient as the prescriber can possibly make it.

Hence in prescribing, 1. when both liquids and solids enter the receipt, they must be so proportioned, as to be, when mixed, of the designed consistence. (*α*) This requires the knowledge of menstrua, or how bodies act on one another, and what is necessary to their union. You know that saline, gummy, mucilaginous substances require aqueous menstrua; but oils, balsams, resins, can be dissolved only by spirits, alcali, salts, yolks of eggs. But it is not so commonly known that camphora dissolves in a manner resinous gums, as *assa foetida*, with which, in any considerable quantity, it cannot with powders be reduced into pills: that liquid balsams require the assistance of heat to bring them to that formula with powders: that jalap, opium, and the like, dissolve better in proof than in rectified spirits, &c. (*β*) Nothing superfluous either as to quantity or quality, nothing that will render the medicine unnecessarily nauseous, should enter receipts: as coloured syrups in emulsions, vegetable astringents in chalybeate liquids, mucilages in juleps, &c. And (*γ*) Nothing which destroys the nature of the chief ingredient; as acids with absorbents, when an antacid is wanted. “*Scammonium acidi miscela reddit arenæ instar, inertissimum; alcali fixum contra adjuvat. Jalapam & colocyinthidem fere cicurat penitus sal tartari.*” *Gaubius*, p. 48. (*δ*) Though this is to be understood cum grano salis. *Vide quæ* § 102, 103, 104, habet.

2. To prevent mistakes, shun all unusual even though medical names, all abbreviations or nuncupationum genera, and chemical characters: even these usual characters, ʒ , ʒ , ʒ , may occasion fatal mistakes. And where there is danger, the direction how the medicine is to be taken should be in English. In a receipt for one in the country I wrote once *capiat ʒij. omni quadriborio*, and the apothecary explained it every quarter of an hour. You may try one another’s knowledge of the names, nuncupationum genera, characters, &c. but risk not your patient’s safety for a trial of the apothecary’s skill. Farther, let every thing be distinctly and orderly written: For,

3. Every regular prescription ought to consist of eight parts, *viz.* 1. The order (which *Gaubius* calls the *initium*) R or ʒ, Recipe. 2. The ingredients in order, with their quantities. 3. The form they are to be of, and how they are to be reduced into it. 4. The time and manner of giving the medicine. 5. The signature, or how it is to be named. 6. The patient's name for whom it is designed. 7. The date. 8. The physician's subscription.—As for the *formularum partes quatuor*, *viz.* *basis*, *adjuvans*, *corrigen*s, & *constituens*, though insisted on by many, I think it an improper division, few formulas containing them. A *basis* cannot be wanted; and a *constituens* is sometimes necessary: but the other two are frequently useless, and often prejudicial. However you may see *Gaubius* on this head, à § 74 ad 91. Let this suffice as to formulas in general: I shall now consider them in particular.

S E C T: VII.

The formulas commonly in use in extemporaneous prescriptions are *pulveres*, *eleuaria*, *pilulæ*, *trochisci*, *tabellæ*, *mixturæ*, *julapia*, *emulsiones*, *infusa*, *decocta*, *cataplasmata*, *linimenta*, *unguenta*, *cerata*, and *emplastra*. Were I only to give you an abridgment of what authors have written on the first and even most simple formula, it would take more time than what I have allotted for the lecture; and yet perhaps I should say little which you know not already. I shall therefore be very short: for with relation to

1. *Powders*; need I tell you what a *pulvis* is; what the *materia pulverum*; that there are *pulveres crassi*, *subtiles*, & *subtilissimi*; that they are used outwardly as well as inwardly; how they are to be taken; that they are ordered for one or more doses; that some are called eye-powders, or *collyria sicca*; teeth-powders, or *pulveres dentifricii*; hair-powders, *pulveres cyprei*; snuff-powders, *errhina*, or *ptarmica*; topical powders, as for *cucuphæ*, *frontalia*, *scuta*, *facculi*, and the like? No. Neither shall I trouble you with recipes: you have enough of them in *Gaubius*.

Only, *tyronum gratia*, let me observe: (α) That soft and even liquid substances may be powdered, by adding s. q. of such as are dry. Thus *Mercurii* p. ii. with sulph. p. i. or oc. canc. aut facch. p. iv. forms a powder: and *olei*, aut *balsami* p. i. with *facchari* p. vi. vel viii. are reduced into *balsamo-facchara*, and *elæosacchara*. (β) The quantity to be taken at a time (if unpleasant) cannot well exceed ʒj: ʒj is commonly enough. If it be taken in a wafer (in *libo*, called elsewhere, less properly, *nebulæ*, & *oblatum*, but more properly by *Boerhaave*, *ollati involucrum*) it ought first to be moistened with some syrup or other liquid, that it burst not in the throat in swallowing. And (γ) if substances of very different efficacy are conjoined in a receipt, to be taken at several times, it is safest to order them to be made up into separate doses: *ex gr.* R *Ipecac.* p. ʒß. *turbith mineral* gr. ij. (or *jalap. pulv.* ʒj. *elater.* gr. j.) *pro una dosi*; & sic *F. doses duæ, tres, &c.* As to prevent loss, when a very small quantity of a strong medicine is to be given in a paper, it is proper to mix with it some innocent powder, as *pulv. glycyrrhizæ*, *facchari*, *elæosacchari*, by which also its taste may be improved or varied at pleasure, and little or nothing of it stick to the cover. I hope every one knows the instruments for

trituration, wood, marble, metal and glass mortars, porphyries; when and how to use each; and the use of water in levigating hard and gritty substances. On this subject you may consult *Gaubius* à p. 52 ad 66, à p. 218 ad 222, à p. 234 ad 244, and in many other places.

2. *Electuaria*. “Electuarium, ab electione rerum quibus conficitur dictum; “an Electuary.” *Cambridge Diction*. “The term Electarium has of late “been most generally written Electuarium; but here is chosen the ortho- “graphy of *Cælius Aurelianus*, the most ancient author we have, who uses “the word.” *Pembert. Disp.* p. 333. An Electuary or Electary, as you will, goes under many other names, as Antidotus, Confectio, Mithridatium, Diacordium, Opiatum, Orvietanum, Philonium, Requies, Theriaca, &c. which are all Electuaries; as was ἐκλεκτον, frequently used in *Hippocrates*.

(α) All sorts of substances may be made into Electuaries; liquids wanting only a due proportion of solids, and solids of liquids, to bring them to the consistence: yet acids with alcalies or absorbents, sulphur with limatura ferri, do not well agree. “Deliquescentia, exhalantia, putrescentia, effervescentia, facile fermentantia aut aciescentia, hic minus conveniunt.” *Gaubius*, p. 75. (β) Of common vegetable powders p. i. requires syrupi, vel mellis despumati, p. iii. or, if the powder be very light, p. iv. to bring them to this form: or vini, vel aquæ, p. ii. plus minus. (γ) The dose may be ʒj, and cannot well exceed ʒij, to be taken *per se* in a proper liquid, or in a wafer, as is most convenient. (δ) If one dose of an Electuary be only prescribed, it is called Bolus: or a Bolus is a small Electuary to be taken at once.

Loch, loboch, linctus, λειγματα, vel ἐκλειγματα, are of a consistence between syrups and electuaries. They are taken *per se*, and slowly swallowed; so ought to be very palatable, and made chiefly of such ingredients as melt in the mouth; as of sugar, honey, sweet juices and oils, or the like. Hence gum ammoniac, helenium, thlaspi, capivi, & similia, are not very proper. If powders are added, they ought to be very subtile, and not exceed the one-fifth part of the whole. Their use determines the quantity to be made at a time.

3. *Pilulæ*, or *Catapotia*, (for the ancient names of which see *Le Clerc's Hist.* p. 604.) are the most convenient form for all excessively bitter, acrid, nauseous, gritty substances, except fixed and volatile alcalies, which run p. d. or evaporate in the common air. (α) The mass into which they are formed differs from electuaries in consistence, and commonly also in tenacity. Hence resinous gums, rosins, if not friable, concreted juices, extracts, are *per se*, or assisted by heat, capable of this form. (β) Vegetable powders, and such like, with an equal quantity of a syrup, well wrought, becomes a mass of pills. If you weigh the full quantity ordered in the *Disp.* of the Pil. Coccia, you will find it about ʒvj. But of spirit or water one half will suffice. “Posita excipiendorum pulverulentorum ʒj, excipientis spissi, ut mellis, terebinthinæ, &c. ʒv ad vj; minus spissi, ut syrupi, vitelli ovi, balsami, &c. ʒiij ad iv; liquidioris, ut essentia, elixir, tincturæ, spiritus, &c. ʒij ad ʒiij opus est, ut obtineatur iusta Pilulæ spissitudo.” *Gaubius*, p. 92. Though I think the proportions of the excipient too small. For farina avenæ ʒj requires aquæ ʒß to bring it to a paste of the consistence of a mass of Pills. But still regard must be had to the specific gravity of the species. *Fiantque experimenta*. (γ) Pilulæ, N^o xii. made from ʒj of the mass, are of the common size

size here: and they need not be less than of gr. i. weight. “ Si quantitas
 “ pondere determinanda sit, non facile majores Pilulæ pendeant ultra gr. ij,
 “ mediæ ultra gr. j, minores gr.ß.” Vide *Wedel. De comp. med. extemp.* p. 115.
 “ Moles cujusvis Pilulæ hodie quam olim minor, haud tamen ubivis eadem,
 “ aliis ægris, medicis, nationibus alia arridet. Major est, si massæ gr. viij
 “ vel x constat, Anglis tamen & Gallis usitatissima, imo vel hac quoque gran-
 “ dior. Mediocre dant gr. ij ad v, quæ inter Belgas fere recepta est. Mi-
 “ nima gr. j. Germani amant, quorum nonnullis hæc etiam major visa, non-
 “ nisi in ij, iij, vel iv, decerpta pilulas demum placet.” *Gaubius*, § 164 p. 89.
 Surely Dutch throats are as wide as any. (A) The quantity to be taken at a
 time is ʒi commonly: and ʒj is seldom exceeded. (N. B. Pilulæ de sapone.)
 “ Pondus pro una dosi, non facile excedat ʒj.” *Baltbas.* p. 92. “ Dosis quo
 “ minor, eo fere gratior, modo efficax sit; ut ideo defectu peccari huc vix
 “ queat: ʒj ad ʒi. commodè ingeritur simul. Ad ʒij, vel ʒj, raro adscendi-
 “ tur, nisi indicatione urgente, materie specificè graviore, ægro facile.” *Gau-
 bius*, § 165. p. 90. For the delicate they may be gilded.

4. *Trochisci, pastilli, troches*, are only powders, &c. made into a paste with
 such liquids as will make them cohere, formed into little cakes or balls, and
 dried in order to preserve these powders from spoiling, have them ready for
 use when wanted, or for convenience in using them. (a) “ Trochiscus (in-
 “ ternus), pastillus, est pilula, non globosa, quæ non integra, sed instar ecleg-
 “ matis, sensim in ore dissoluta, deglutitur: ut hinc eclegma solidum fere
 “ dixeris.” *Gaubius*, p. 98. (β) If the solids are farinaceous, gummy, or
 viscous in nature, any water, wine, or juice suffices: if not, by gums, syrups,
 sugars, mucilages, they are easily made so. Gum tragacanth is much used in
 troches for inward use. (γ) The figure and size is arbitrary; but commonly
 round and flat, and of ʒj, ʒi.ß, or ʒij weight, and sealed if you please. But
 they may be as small as pills, and are sometimes called orbiculi & forinæ lu-
 pinares. (δ) They differ from plaisters, as not made of oils, or resinous sub-
 stances; and from tablets, as not needing the decoction or other preparation
 of sugar, in order to their formation; that is in their excipient chiefly. Vide
Gaub. à p. 98 ad 105. “ Pastilli hæc ratio est, arida medicamenta contrita,
 “ humori non pingui, ut vino vel aceto coguntur, & rursus coacta inarescunt;
 “ atque ubi utendum est, ejusdem generis humore diluuntur.” *Celsus*, l. 5. c. 17.
 p. 249. Vide *Le Clerc's Hist.* p. 215, 605, 615.

5. *Tabellæ, Morfuli, Electuaria solida*, called sometimes *Tessellæ, Lozengæ*, &c.
 (a) are formed of sugar mixed or impregnated with the virtues of powders,
 syrups, electuaries, essential oils, &c. *Gaubius*, p. 112. distinguishes between
 Tabellæ & Rotulæ sive Orbiculi, although the excipient is the same; but he
 owns that the “ differentia nisi levis est.” (β) The sugar is dissolved in water,
 (N. B. Saccharum rosatum is ordered in the *Cod. Med.* p. 105.) boiled, clarif-
 ied, and evaporated to a proper consistence; so that, when mixed with the
 other ingredients, it may be solid when cold. (γ) The sugar may be to the
 species as four to one in cathartic tablets; and as eight, ten, or twelve to
 one in such as are alterative: as the quantity of either to be made at a time
 cannot well be less than ʒiv, and seldom need exceed ʒxij. (δ) Mineral acids
 would hinder the sugars from being tabulated; and vegetable acids require a
 particular encheiresis: all salts are unfit for this form. Essential oils do better
 when

when rubbed on the formed tablets than when mixed over the fire: you may also perfume or gild them, as you please. (ε). The whole, being well mixed and of a right consistence, is poured into moulds or boxes, or on a plain surface properly oiled, to cool, and be cut or broken, when cold, at pleasure; or, while warm and soft, it may be wrought or twisted into any figure; which has, without any necessity, procured this formula a variety of names, as pandaleon, penidium, pasta regia, manus Christi, &c. “Figuram alii aliam huic massæ conciliant; vel enim gelascentem, pyxidi infundunt, hujus ut figuram indunt, pandaleon tunc dicta: vel & totam simul, aut per partes, super planum effusam scindunt, finguntve in massulas quadratas, quadrato-oblongas, rhomboideas, &c. quas morsulos, tabellas, tessellas, lozangias, &c. adpellant; licet satius foret unicum morsulorum, vel tabularum nomen, ex terminatis reliquis, constanter adoptare.” *Gaub.* § 190. p. 107. Ought not, for the same reason, the names rotulæ & orbiculi to be exterminated, or confined to trochisci, with which they agree in signification as well as figure? “Nota. Saccharata reliqua, olim inter medicos usitata pastam regiam, massam panis, pineolatum, mustaceum, buccellatum, &c. quid opus commemorare? Cum e pharmacopoliis hodie relegata, ad cistores dulciarios transferint.” *Gaub.* p. 117. (ζ) The form of them may be left to the apothecary; but in cathartic tablets at least the quantity of each ought to be determined: *e. g.* F. Tabellæ ʒj, ʒij Singulæ.

There are in *Pb. Edinb. edit.* 1744. Saccharum hordeatum sive Penidium, Saccharum rosatum, & Tabellæ Diatragacanthi, all Tablets, if the last deserves to be so called; the Trochisci de Terra Japonica being as properly Tablets as they are. In the *New Lond. Disp.* the Saccharum rosaceum is such Tablets as our Tabellæ Diatragacanthi, but made without heat, and without dissolving all the sugar. But the Tabellæ cardialgicæ will pass for Tablets no-where, if any distinction is to be made between Tablets and Troches: which however the authors seem to admit of; the title of this section being Trochisci & Tabellæ, which otherwise should have been Trochisci *aut* Tabellæ.

S E C T. VIII.

All the usual liquid forms of medicines may be comprehended under the names *Mixtura*, *Julapium* sive *Julepus*, *Emulsio* sive *Emulsum*, *Infusio* sive *Infusum*, and *Decoctum* sive *Apozema*: of which in order.

1. (α) *Mixtura*, a *Mixture*, is a liquid medicine composed of different fluids, or of soft substances, with or without powders, mixed in such proportion as not to diminish too much its fluidity, or to make it too disagreeably thick. And for the most part it is little else than a powder in a proper vehicle. (β) The excipient or liquid may be water simple or distilled, infusions, decoctions, wines, &c. and the other ingredients, almost any that can be for a little while suspended in the liquid, if finely powdered. (γ) *Liquidi* ʒj admits easily pulveris ʒβ; but more if designed for external use. For gargarismi, liquida epithemata, collyria, errhina, &c. are commonly *Misturæ*.

2. *Julapium* sive *Julepus*, a *Julep*, is said to come from a Persian word *Juleb*, or *Julep*, signifying a potio dulcis. “Arabibus vox Julebi à syrupis non distin-

“distinguitur.” *Blanc. Lex.* 363. “Cæterum ignorare minime decet quod ex iis quæ ingeruntur, alia trita solum, ac in levorem redacta exhibemus: alia liquore quopiam idoneo subigimus, & vel plana singentes in circuli figuram efformamus, quæ *περισκῆς* nuncupamus: vel in exiguos globulos cogimus, & a deglutiendo *καταποτια* appellamus: aut aqua decoquentes ad tertias & colantes, eum tantum liquorem jam medicamentosum usurpamus: aut cum altero quopiam, puta vino, melle, sapa, vel ejusmodi alio conjuncta propinamus; aut quod proportionem iis respondet *σακχαρ*, vel mel, prout expedire arbitramur, denuo cum medicamento, quouique concreverit, ac constiterit, coquimus, & *σεραπιον*, vel *ζελαπιον*, nominamus. Quin & alia conficimus, &c.” *Astularius*, l. 5. c. 1. col. 249. It is written Julepum in the *Lond. Disp.* A Julep is a clear transparent (like crystal) or a beautiful red or blue coloured mixture, of a pleasant taste and smell, composed of distilled waters, tinctures, syrups, &c. sometimes acidulated ad gratiam. More than a pound is not commonly ordered, nor less than half a pound: and sacchari ʒj, or ʒij generally is enough to sweeten ʒj of the waters. There are three Julepa, or rather one, in *Pb. Lond.*

“Tres mixturarum species usitatæ sunt: 1. Diffusior quæ *Julapium* audit. 2. Media, quæ propriè *mixtura* vocatur. 3. Contracta, cui nomen varium (guttæ, haustus, tincturæ, essentia, spiritus, balsama, olea, liquores) ut infra patebit. . . Julapium, julepus recentiorum est mixturæ species dilutissima, ferè diaphana, ex sapore, odore, colore jucundioribus, constata. Potum hinc suavem exhibens, pluribus dosibus destinatum. Veterum ergo julepus, qui dilutior syrupus est, a nostro discrepat spissitate.” Vide *Gaub.* p. 180 ad 209.

3. *Emulsio*, *Emulsum*, an *Emulsion*, is an artificial milk, made commonly of oily farinaceous seeds, rubbed with water in a mortar. The semina quatuor frigida majora & minora, semina cardui Mariæ, bardanæ, carthami, amygdala dulcia, nuclei pini, &c. elæosacchara, balsamosacchara, gummi-resinæ, olea, and balsama, dissolved in vitello ovi, &c. with common or distilled waters, decoctions, &c. may be made into emulsions, and answer various intentions: but are most used as a diluent antacid drink. (α) Whatever spoils the colour, consistence, or taste of this formula are to be excluded; as pistachia, coloured syrups, acids, semen psyllii, sinapi, spiritus urinosi, & similia. (β) For diluent Emulsions sem. ʒvj, vel ʒj is enough for aquæ lbj, which may be aromatised, and sweetened pro re nata. Nutritive, or otherwise medicated, Emulsions may be much thicker. “R avenæ excorticatæ ʒiij. ℞ cum aquæ q. s. Emulsio, cujus lbjss. admisce nitri puri ʒss, syrup. violarum ʒj, aceti squillit. ʒij. (*Boerb. Lib. de M. M.*) p. 51.) S. utatur pro potu familiari.” *Gaub.* p. 176: who there calls it Emulsio antialcalina: though it is not properly an emulsion. . . . “Spissiora sunt si menstrui ad materiem emulgendam proportio tripla, quadrupla, quintupla est: dilutissima si duodecupla ad vigecuplam usque: media si octupla.” *Gaub.* 173. (γ) No more should be ordered at a time than is to be consumed in a day, especially in summer, because the common Emulsions (at least) soon grow sour, and spoil. So that less than lbj is too little, and more than lbj or lbiv generally too much.

4. *Infusio*, *Infusus*, sive *Infusum*, an Infusion, is a liquid impregnated with such parts of any substance, macerated in it, as it can dissolve without boiling. The liquids are either aqueous, vinous, or spirituous; and are sometimes assisted by salts to increase their dissolving powers, as menstrua. Minerals, animals, but especially vegetables, afford plenty of materials for infusions. For the doctrine of menstrua, vide *Boerb. Chem.* i. p. 669 ad 848. I need not tell you how many aqueous, vinous, and spirituous fluids there are; neither how many simples will yield somewhat to each of them; but only observe a few things in general. And (α) although the proportion of the menstruum to the materials must vary according to their nature, as well as the design of the infusion, yet generally the liquor to be strained should be at least quadruple, or rather octuple the weight of the substances infused. Authors tell us that three, four, five, six, eight, or ten times as much liquid must be taken, as of materials; although many dry vegetables will absorb triple or quadruple their own weight of the liquid; whilst many also will impregnate eight times their own weight of a fluid, as much as they can do half that quantity. Thus sennæ ʒij will impregnate aquæ ʒiv. as strongly as if twice the quantity were infused, because the water will bear no more of the purgative parts of that body, as *Dr. Grew* observes, (*vide* gratiola, antimonium, &c.) So for vegetable cathartic Infusions, one part of materials may generally suffice for ten or twelve parts of liquid. But in alterative Infusions, or in such as are both alterative and cathartic, the use whereof is to be continued for some time, the ingredients may be to the liquid, or menstruum, as one to thirty, fifty, or a hundred. “Quod si infusum, non medicamenti, sed potius poti medicati, quo ordinarie uti liceat, rationem habere debeat, quantitas infundendorum diminuenda est magis, ita ut sapor quidem aliqualis medicatus percipiatur, is tamen neutiquam prædominetur, nec potus gratiam suam perdat. . . Licet vero nec hic proportio strictè determinari queat, vix tamen erraverimus, si ad rerum infundendarum partem unam assumamus liquidi (vini scil. aut cervisiæ fermentantis) partes ducentas.” *Balthaf.* p. 128. — (β) The dose of purgatives in infusion is generally allowed to be double that of the substance; which cannot be admitted if they are infused in a proper quantity of a right menstruum. And probably this has been made a rule, because it has been the practice, either to take a wrong menstruum, or too small a proportion of it, or infuse for too short a time; or because there is something in the nature of the cathartic which may make it adhere too long to the intestines, or irritate more than the Infusion would do. *Vide* Agaricum, Colocynth, Antimon. *Mr. Bolduc* says rhabarb. pulv. ʒj purges more than the Infusion of ʒiʒ. *Mem. Acad.* 1710. But I have known the Infusion sennæ vel rhabarbari ʒj, yea ʒʒ, purge plentifully. See also Ptisana cathartica, *Pb. Batcanæ*. Purgatives must be dissolved, in part at least, before they begin to operate: hence it is that Infusions sooner begin to purge, while the substance may continue the operation longer. The dose therefore of cathartic Infusions need not exceed the dose in substance: that is *ex. gr.* the Infusion rhabarb. ʒj, if rightly made, will purge as well as the same quantity in substance, though perhaps the operation may be sooner over: but of alterative and cathartic Infusions, or purgative diet-drinks, the $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, dosis communis is sufficient, according to the time the use of them is to be continued. “Folia, herbæ, flores hic sæpe ad mani-
“ pulos.

“pulos vel pugillos; fructus ad numerum præscribuntur: emetica tamen & purgantia pondere determinanda sunt. Asari saltem folia exceperis, quæ numero frequentius præstituuntur.” *Gaub.* p. 124. β . An unwarrantable exception, as is observed above. *Vide Asarum.* — (γ) Nor is the menstruum to be disregarded in determining the doses of Infusions. *Aquæ* \mathfrak{z} vij can be taken in a morning with more ease than *vini* \mathfrak{z} iv, or *aquæ vitæ* \mathfrak{z} ij. Infusi *aquosi* \mathfrak{z} iv, *vinosi* \mathfrak{z} ij, *spirituosi tenuioris* \mathfrak{z} j, need seldom be exceeded at a time; but may be repeated once or twice a day if need be. “*Aquosa* fere ab \mathfrak{z} j ad \mathfrak{z} ij, v, vj; *vinosa* à \mathfrak{z} ß ad j, ij, iv; *spirituosa* à \mathfrak{z} ij ad \mathfrak{z} ß, j, ij, exhibentur. *N.* Materiem ut plurimum duplo, triplo, imo & quadruplo, majore quantitate pro dosi exhiberi in Infuso, quam in substantia, ut vocant: prout nimirum virtus per minus majusve volumen est diffusa, aut tota, vel saltem ex parte, adhibito menstruo elici valet.” *Gaub.* § 215. p. 122 & p. 124. α . This may be true of alteratives, whose dose is determined by bulk, or which contain little medicinal or useful in a great deal of useless substance: but it is not so in purgatives, & similibus. — (δ) If the menstruum is spirit, the infusion is called commonly *tinctura*; if wine, *vinum*; and if water, *infusum*: but if one dose only is designed, *haustus*, or *potio*. “Si vero lac, serum lactis, vinum, cerevisia, hydromel, &c. pro menstruis adhibita sunt, ab his nomen accipit formula. Si tandem materiem dant aromata; menstruum *aquæ stillicitiæ aromaticæ*, aut *vinum vel spiritus vini*, saccharique multum accedit, & depuratio limpidissimæ, *clareti* vel *nectaris* dari solet nomen: sigillatim tamen *vinum Hippocraticum* dicitur, si basin aromatum constituit cinnamomum, & pro menstruo vinum est.” *Gaub.* p. 130. *De Infusis Tractat.* a p. 118 ad 134: where you have a great many specimens.

5. *Decoctum*, *Apozema*, a *Decoction*, differs from an Infusion only in the materials being boiled in the menstruum. Hence such substances only, as do not so well, or so soon, yield their virtues to their proper menstruum by infusion, need or ought to be decocted; and such menstrua only are proper which boiling does not spoil. Wherefore (α) distilled waters, wines, spirits, are not proper menstrua, unless the decoction be made in close vessels, or continued a very short time. Neither are aromatica & acria volatilia proper materials. (β) The boiling is to be continued for a longer or shorter time, according to the nature of the materials; and not in proportion to their solidity or laxity, hardness or softness: for China and Sarsa bear as much boiling as Guajacum. Knowledge of the simples is the best directory in this case. You have *Gaubius's* general rules, § 227. p. 142. α — ζ : according to which some substances require to be boiled for six hours and more, others only for a quarter of an hour. “*Asarum coctum* magis diureticum, quam emeticum est. *Liquoritia* diu cocta amarescit. . . *Rheum*, *myrobalani*, &c. diutius cocta, vi purganti adstringentem jungunt. *Mucilaginosa*, *rad. symphyti*, *althææ*, *malvæ* coctione longa lentorem inferunt liquori injucundum, &c. *Gaub.* p. 140. π . p. (minus accuratè) (γ) The proportion the liquor should bear to the substances decocted is the same as for infusions, regard being had to the waste in boiling: as is also the dose. It is sometimes convenient to clarify the decoction with the whites of eggs, sweeten and aromatise it by infusion, &c. “*Decoctum* ad dosin unicam præscriptum vocatur *haustus* vel *potio*; ad plures, si menstruum spirituosum est, *tinctura*; si aquosum, *decoctum* vel *apozema*; si ani-

“malium partes basin materiæ constituunt, *jus* vel *jusculum*; si materies semel decocta cum recente aqua iterum coquitur, *bochetum* vel *decoctum secundarium*. Reliquæ denominationes hodie fere exoluerunt.” *Gaub.* p. 149. He might have added the modern *ptisana*, or *ptissana*, one of the most common decoctions. “Galen in one place speaks of boiled water, which they cooled in snow, and was called in Latin decocta, and *δεκοκτα* also in Greek; whether in imitation of the Latin, or for want of a more proper name.” *Le Clerc Hist.* p. 606. And *N.B.* hæc est Néronis decocta. Vide *Galen Meth. Med.* l. 7.

To decoctions may be referred *hydromel*, *oxymel*, and *clysteres*. 1. *Hydromel* is either *aquosum* or *vinosum*; and each of these *simplex* vel *compositum* seu *medicatum*. (α) *Hydromel aquosum* is mellis p. i. & aquæ p. viij, x, vel xij, mixed and decocted, and skimmed so long as it foams, or to the consumption of a fourth part. (β) *Hydromel vinosum* is mellis p. j. & aquæ p. iv. decocted till an egg swims in it, clarified, skimmed, and fermented. Some use more water. (γ) Either of these may be impregnated with the virtues of other medicines, by infusion or decoction. — 2. *Oxymel* is mellis p. ij. & aceti p. j. decocted and skimmed till it attain the consistence of a syrup. If acetum scillatum be taken in place of common vinegar it makes the *oxymel scillatum*, (barbarè *scilliticum*); only the quantity of honey may be a little less. It is mellis p. iij. pro aceti scill. p. ij. in *Pharm. Ed.* where you have also an *oxysaccharum scillatum* (or *syrupus scilliticus*) which takes aceti p. ij. pro sacchari p. iv. (nonne potius āā p. æ?) for such as cannot bear honey. — 3. *Clysteres*, *Clystera*, *κλυσματα*, *κλυσμοι* (à *κλυζω*, lavo) & *Enemata*, *Clysters* or *Glysters*. This is a very ancient remedy: and was not only used by *Hippocrates*; but also the Glyster-pipe is accurately described by him, *L. de sterilibus*, *Ed. Foes.* p. 680. lin. 19. where the instrument, not the injection, is called *κλυστηρ*. The Ibis, an Egyptian bird, is said first to have taught the use of clysters. “Rostris aduncitate per eam partem se proluens, qua reddi ciborum onera maxime salubre est.” *Plin.* l. 8. c. 27. p. 187. Though *Paracelsus* foolishly calls it turpissimum medicamentum, and *Helmont* pudendum medicorum subsidium. A *Russian nobleman* certainly played the fool, when he chose rather to die than receive one. Vide *Wedel. De Medic. comp. extemp.* § 2. c. 5. p. 82. — As to this form of medicine I shall only observe: (α) That a pound is commonly a dose for a man: which proportion should be observed for different ages, except children are commonly allowed a greater quantity of a mild clyster rather than a less of a purgative one. “Ratione ætatis hæc fere regula obtinet, infanti recens nato conveniunt ʒij: provectiori ʒiij, vel iv: puero ʒvj, vel vij: adulto ʒviij, x, vel xij, ratione constitutionis ægri; proceri plus ferunt, parvuli minus: &c.” *Gaub.* p. 372. But, I think, the rules given above for the regulation of doses preferable to these of *Gaubius*: *provectior* is a vague age; and a clyster, if too small, may be (after the first is rejected) repeated, or quickened by a suppository, which admits of a double dose of purgatives. (β) *Clysters* should be injected always blood warm. “Frigida enim omnia intestinis sunt inimica, eaque facile lædunt, cujus triste exemplum memini contigisse in infante serenissimo, cui cum, pharmacopœi neglectu an culpâ, clyster actu frigidus applicatus esset, brevi post convulsus obiit.” *Wedel. comp. med. extemp.* Sect. 2. c. 5. p. 92. They should not be injected with too much violence, nor loaded with large quantities of narcotics, or strong cathartics,

which operate ἀνω αὐτ κατω. “Sennertus asserit opiata, in summo virium
 “lapfu, tutius clysteribus quam per os infundi; verum nos potius dicimus,
 “opiata tutius interius, quam in clysteribus adsumi. Certior enim inde spe-
 “rari potest & tutior efficacia. . . Notum est exemplum Salmuthi, cent. 2.
 “obs. 97. quendam ob opium in clystere receptum ad 5j, in coma incidisse.”
Wedel. l. c. p. 88. “Ab opii gr. iv. clysmati additis, æternum dormivisse
 “visus est æger.” *Gaub.* p. 374. Both the doses are too large; though the
 last could scarce have had such fatal effects taken by the mouth. (γ) It is
 controverted whether one can be nourished by clysters: but the affirmative
 seems pretty evident. “Parum fidæ & perfectæ nutritionis inde sperare licet,
 “ubi ex cloaca facienda est culina.” *Wedel.* l. c. p. 94. “Vim nutrientem
 “qui clysmatibus negant; nescire videntur antedicta (de opio). Quin & lac-
 “tea, in colo hominis, chylo repleta, demonstravit *Cl. Winslow.* A vino, spi-
 “ritu vini, etiam parciore copia, clysmatis specie injecta, nata temulentia, &c.”
Gaub. p. 377: as it is also whether it is better to receive it lying on the right
 or on the left side; which last I would prefer, were it of any consequence.
Gaubius, p. 376, is for the right side.

S E C T. IX.

It remains only that I say somewhat of *Cataplasms*, *Liniments*, *Ointments*,
Cerots, and *Plaisters*, in order principally to fix the consistence of the four last,
 in which authors commonly take an unbounded and so an unreasonable lar-
 titude, if their names deserve to be retained.

1. *Cataplasma*, from καταπλασσω, illino, is of the consistence of an electu-
 ary nearly, or of a poultis, and used outwardly only. If it be thick enough
 not to spread further than is designed, and so soft as not to hurt the part, it is
 of a right consistence. “Cataplasma est epithema molle, cohærens, pulti-
 “forme, mediæ inter unguentum & emplastrum consistentiæ, calore non
 “colliquescens, varii usus externi. Estque duplex, coctum aliud, aliud cru-
 “dum.” *Gaub.* p. 244, (α) Every substance, whether liquid or solid, may
 make a part of this composition. For whatever by decoction can be reduced
 into a pulp . . . whatever is fit for decoction . . . and whatever can be pow-
 dered . . . may, with the addition of water, milk, wine, &c. except oil, but-
 ter, and the like, be brought to the consistence of a cataplasma. (β) Yet, to
 prevent the too soon hardening of a cataplasma, a small proportion of oil, but-
 ter, ointment, &c. is conveniently added. The quantity to be made at a time
 must be determined by the frequency of its use, and the size of the part to which
 it is to be applied. *Gaubius* treats of *Cataplasms* à p. 244 ad p. 260; and
 of *Balnea humida ac vaporosa*, & *suffitus*, à p. 261 ad 287 inclusive.

2. *Linimenta*, *Unguenta*, *Cerata*, & *Emplastra*, differing almost only in con-
 sistence, I shall conjoin them. (α) For the basis of all these, or their excipient
 if you please rather so to call it, oily or resinous substances are in common use;
 except it be for the Unguentum Ægyptiacum, which therefore, perhaps, is
 improperly called an ointment. And they are either *liquida*, as olea, axungia,
 butyrum, and whatever the heat of one's body melts; *tenaciora*, as terebin-
 thina, balsama, &c. or *ficca*, as cera, resina, gummi resina, &c. To these
 may

may be added juices, wine, vinegar, mucilages, soaps, extracts, powders, metallic calces, &c. in a due proportion: though they are by no means necessary to the consistence of any of these four formulæ. (β) Now since no plaister need be so hard as common *resina alba*, and no liniment is so fluid as oil; of these two, differently proportioned, may be made a liniment, ointment, cerat, and plaister, without any thing else. And since a good ointment may be as much thicker than oil as a plaister is thicker than an ointment, and a liniment as much thinner than an ointment as a cerat is thicker, a cerat being of a consistence between an ointment and a plaister, as a liniment is between an ointment and oil, dabunt

Resinæ p. j. & olei p. viij. Linimentum:

Resinæ p. j. — olei p. iv. . Unguentum:

Resinæ p. j. — olei p. ij. . Ceratum: and

Resinæ p. j. — olei p. j. . Emplastrum.

If powders are added, the oil must be proportionably increased, and regard also had to such substances as act like menstrua on one another, as well as allowance made for a reasonable latitude in the consistence of each of these forms. But as there is seldom occasion in extemporaneous prescription to order new plaisters, &c. and the preparation of the officinal kinds are among the first things taught in the shops, I shall say no more about them: you will find *Gaubius* prolix enough on them; as also on *balsama vulneraria & odorata*, *epispastica*, & *fricta* or *fricatoria* (two words of his own making I believe); as on his other *formule externæ*, to which I refer you.

“ Pro diverso emplastri usu triplicem obtinet spissitatis gradum, molliorem nempe ad cerata accedentem, medium, & duriorum. Emollientibus, altum penetraturis, ad mobiles partium flexuris applicandis sparadrapis, prior magis convenit: exsiccantibus, adstringentibus, firmantibus, &c. bini posteriores. Proportio hinc pro variâ spissitate, ita fere determinatur, ut sint pro

Molli	} Olei 3j. . . Ceræ . .	{ Uncia j. }	{ Pulver. { 3ß.		
Media				{ Uncia iß. }	{ Drach. vj.
Duriore					

Gaub. p. 293.

“ Ceratum, Cerotum, Cerelæum, est emplastrum mollius, mediæ fere inter emplastrum & unguentum spissitatis. . . Proportio mutua ingredientium sola discrepat; quippe quæ talis est, ut olei 3j recipiat ceræ 3ß, pulverum 3j, 3iß, pro ponderis specifici varietate: aut & omisso pulvere ceræ 3v.” *Id. p. 301.*

“ Unguentum est medicamentum externum, cerato mollius, mellis fere aut electuarii consistentia, calore liquefcens, ex pinguibus maxime constans . . .

“ olei 3j cum ceræ, aut hujus analogorum 3ij, 3iij, unguentum constituit.

“ His si pulverem addis, ceram pro rata minue, ut hujus sint 3ij, illius 3j, 3iß, aut quantitate pulveris definita, ceræ q. s. adde.” *Id. p. 304, 308.*

“ Linimentum, litus, est Unguentum mollius, mediæ fere inter oleum & unguentum spissitatis, illitu efficax. . . Proportio ingredientium mutua, ob

“ consistentiæ varietatem, admodum vaga est. . Vix peccatur excessu tenuitatis, at omnino spissitatis. . . Litus acquiritur ex olei 3j, & ceræ 3j.” &c.

Id. p. 324.

Wax being of the consistence of a common plaister, I have chosen rather *resina flava*; which, being friable, may be compared to powders; and so ought to be diminished, quantity for quantity, when powders are taken. There have been *unguenta potabilia*, or for inward use, and such is the *bals. Locatelli*.

Thus I have finished my Lectures on Medicinal Simples. What I had principally in view, in composing them, was to discover and correct the numerous errors concerning the *M. M.* such especially as relate to their use in medicine. These *floræ simplicium*, or *horti medici*, are still over-run with weeds; so that it is one of the most difficult problems in physic, how to distinguish between the spurious and genuine virtues of simples. And how little has been done, even to this day, in order to a due solution of it, is too evident from the fate even of the most modern dispensatories, and precarious practice of physicians. A *Dr. P.* can condemn a simple one year, after he has ten years used it without any success: a *Dr. Cl.* reject another as noxious, after consuming great quantities of it in upwards of forty years practice! How often are the compositions of the shops altered! How seldom bettered! How often do even graduates prescribe what they never saw, and know nothing of! “I am informed (says a learned *London physician*) by a friend to the grandee of the faculty, that he has got above 50000 pounds by prescribing Gascoign’s powder; though I am persuaded, that, if you asked him what are the ingredients it contains, he would not be able to tell.” One who flourished nearer ourselves had the assurance to declare, that a physician was no more concerned to know what opium is, or how prepared, than a lady is to know how her chocolate is made, and where; and at the same time pretended to account for all its real effects from one merely accidental. What improvement can be expected from such practitioners? Surely every judicious physician does and must regret the little attention given to the *Materia Medica* to this very day.

“Fateri enim debemus, illam partem medicinæ quæ de viribus & usu medicamentorum agit, minus reliquis excultam esse. Eædem vires, quæ apud Dioscoridem, Plinium, Galenum leguntur, adhuc tribuuntur plantis ejusdem nominis. Laudabili industria botanici quæsierunt, ut plantas a veteribus memoratas cognoscerent, talesque characteres designarent, quibus fera posteritas illas ab omnibus aliis potest distinguere. Verum nondum satis indagatum fuit, sedulâ observatione, an vires his plantis adscriptæ certo effectu se manifestarent. Quantum autem utilitatis caperet ars medica, si severo & prudenti scrutinio, expungerentur omnia quæ falsa vel dubia de medicamentorum viribus leguntur. Si unusquisque qui medicinæ operam dat, toto vitæ curriculo, vel unam plantulam omnibus modis examinasset, ut disceret illius usum verum, jamdudum exhaustus fuisset ille labor, & plura haberemus remedia cognita, quibus certo & tuto confidere possemus.” *Van Swieten in Aphor. Boerb. 1147.*

Thus to examine (even all) the medicinal simples has employed most of my time for more than forty years, even preferably to the more beneficial practice of physic, because I thought I could thus, considering my station, be more serviceable to mankind. And I have the vanity to think that I have done as much, if not more, than any one has done; nay even more than has been done hither-

to, towards cleansing this Augeæ stabulum, the Materia Medica, of its dross and filth. In order to which,

I soon found myself obliged to depend more on experiments than on authorities, how great soever; and freely, though modestly, to censure not a few of the generally received opinions, even though supported by the greatest characters of our profession; but never without giving such reasons as to myself appeared convincing: I even never scrupled "to quote passages with a view to "criticise on or condemn them," however much it might give offence, or expose me to censure. (vide *Dr. Munro's Anatomy of the Bones*, Pref. p. iv.) Truth ought to be the only aim in every controversy; and, if that be on my side, I regard not censure; if not, I shall reckon myself obliged, singularly obliged, to every one who discovers my mistakes, and will set me right; and cannot think that I thereby give occasion to useless wrangling, but rather excite to the finding out of the truth, and consequently contribute to the public advantage.—I have also been always careful never to arrogate to myself what I learned from others, but candidly owned to whom I have been obliged; a practice not very common at this day. Do not we see many treatises filled up, as it were, with what their authors have stolen from others, without naming them; claiming discoveries they never made, and pluming themselves with borrowed feathers. I always thought it a principal part of a *Professor's* office to direct students how and what authors they ought to read, which cannot be done without characterising them; for otherwise they may read their eyes out, and be little wiser than when they began, the world is so stocked with books not worth the reading. Certain it is, however, that the *M. M.* is, in the practice of physic, of more universal and general use than any other part of medicine; and at the same time a long study: so that those who neglect it in their youth have reason all their life to regret it. For although you were perfectly masters of all the other parts of medicine, if you are defective in this you can be of no service to your patients, and even of little use to yourselves. For though you could never so learnedly talk or write about the causes, symptoms, &c. of the scurvy or gout, to what purpose will all this be, if you do no more? One, though ignorant of these, who puts his patients on drinking lime-water, does them infinitely more service, if they be cured by it. Yet still the *M. M.* is neglected; and many physicians go on blundering in their old way, prescribing at random, and furnishing plenty of materials for ridiculing the profession. If the patient die, it is of the disease; though it might rather be said of the doctor: if he recovers, the doctor has the praise, though the recovery was frequently owing intirely to nature.

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